Introductory Lecture

ON

SOME OF THE PROBLEMS OF PATHOLOGY.

Delivered at Guy's Hospital, May 7th, 1887,

BY JAMES F. GOODHART, M.D., F.R.C.P.,

PHYSICIAN TO THE HOSPITAL, AND LECTURER ON PATHOLOGY AT THE MEDICAL SCHOOL.

GENTLEMEN,—Pathology, as something more than morbid anatomy, is an attempt to interpret morbid changes—an attempt to unravel not so much the conditions themselves as how they come about, the process which produces them, and the successive steps by which the result is reached. It deals, therefore, with morbid function as well as with structural change, and thus it becomes and is the complement to physiology—if you like so to call it, it is the physiology of decay. In illustration of this take the body of one who has died of old age. There may be nothing throughout it to show *why* it is dead. The organs are simply too small; it cannot even be said that they are too small when it is remembered that the work required of them was so little. Yet here is death. We call it senile atrophy in the certificate, to bring it within range of municipal conception—to give it, in other words, a morbid anatomy. I want, however, to impress upon you that such a case has no morbid anatomy. The viscera are small because little was asked of them, but that little they did well. On the other hand, senility is not wanting in a pathology. "Physiology played out" is the only name I can find for what has nothing to show of its nature, save the fact, the dread reality of death. We may take yet another example with advantage to the full illustration of our meaning. Let it be the grey hair, or if you like it the autumn leaf—for disease is not limited to one world of life. What of morbid anatomy have we in these? Only a change of tint. Nothing, indeed, to show why the end has come. Yet each of these, the silvery lock, the sere and yellow leaf, has its pathology, but it is not one that can be detected by the most minute inspection; it can only be discerned by the study of such changes in general, and of their obvious relation to physiological circumstance. From such as these it is that we arrive at the suggestion that rhythm is an important element of consideration. We are all set—our several parts are all set—to a fore-ordained time, determined for us by the sum of the conditions of bygone ages concentrated down into heredity. Our present environment adds for *us* only the accidental, although something towards the general determining power upon our offspring. And it is quite conceivable that if other disturbing causes did not interfere; if geological conditions, for instance, should so far slowly alter, as to have no appreciable influence on living organisms; if the struggle for existence could pause in its headlong career towards the competitive throat-cutting which threatens to reduce us to a refined Ishmaelism in the not far distant future—if, I say, such influences as these could be eliminated, then this time-setting might come to be the life closure, not of an exceptional individual only, but of all animal life; the average duration of existence, epoch by epoch, would be gradually curtailed, until time should be no longer. But were that all that could be said about rhythm and disease, save as a matter of interesting speculation, either subject might well be left alone. It is, however, not so; rhythm or periodicity plays a considerable part in many a pathological process, and plays it so prominently that perforce one must consider it. It is one of the mysteries of pain which very early in your career will insist upon being combated. Not even the ghosts of Christmastide, when disturbing the midnight watches of Ebenezer Scrooge, exhibited more inexorable punctuality than do some of the worst forms of neuralgia. Pyrexia is ofttimes rhythmic in the regularity of its rise and fall. Many an acute illness will have its diurnal hours of amelioration and relapse. Death itself may come as the climax of a rhythmic order such as this. No matter to what part of the economy we look—whether to the nervous system, with its convulsion, its insanity, its sensory disturbances of all kinds; or to the heart, with its multitudinous vagaries of action; to the liver, with its storms, lithæmic and glycosuric; to the kidney, with its tides high and low, alkaline, albuminous—all these, and no doubt others also, may readily be made to do service to the advocacy of the importance of the *rôle* of rhythm in pathology.

But I would not hold, as some perhaps might do, that pathology is exclusively devoted to the processes of decay. It concerns itself with the dissolving view of life, and therefore is largely occupied with methods of degeneration, but by no means entirely so; for surely if we study the behaviour of many of the new growths, be they hypertrophic, inflammatory, or heteroplastic in their constitution, there is evidence in many a case, not of decay, but of unnatural vigour; and it is this that proves destructive to the organism. A particular tissue or group of cells grows in excess, and other parts necessary to the due carrying on of life atrophy because of its greed, or follow its bad example, or are involved in the anarchy of disease—infiltrated we say in pathological language. But this is all physiological; it is a physiological process, an abounding vitality, that kills us—for who will say that growth and reproduction are not natural processes? The fecundity of a people is a measure of its prosperity; is it less so with the fecundity of the cell?

Have you ever followed out this line of thought or any one of its numberless by-paths? Have you ever, for instance, studied pathological processes by approaching them from the side of the individual cell—by synthesis rather than analysis? Take, for instance, if you can, the elementary cell, and place it in your mind's eye, side by side with one of the vegetable kingdom whose physiology is so much more open to inspection. What about warmth and moisture? Growth is unquestionably favoured by such an environment in the vegetable world; has it no parallel for us? Who will say "No," when a telegram such as this was received at the Guy's Nursing Home only last week: "Please send nurse immediately, skilled in poulticing"? Now what do poultices do? So far as I could make out from inquiry in the particular case, the required skill was the ignorance that should put them on hot enough; in fact, warranted to scald well! Poultices never should be painfully hot, gentlemen. If you want a blister, put on a blister, not a poultice. But this is by the way. In mentioning poultices, too, I am reminded forcibly that our knowledge of pathology is advancing, or perhaps I ought to say changing, rapidly. Forgive me if in the light of modern surgery I speak of what should seem to antiseptics as but obsolete barbarity. But, at any rate, poultices used to be applied—and no doubt successfully so—for the purpose of encouraging suppuration, and this encouragement was in great measure due to the application of warmth and moisture, and to the promotion thereby of cell growth or proliferation. We to some extent know that this is so, for in the lowest forms of animal life a carefully graduated application of warmth can be shown to increase the activity of cell proliferation. I doubt not that you can supply illustrations from your own experience of morbid processes which illustrate this, but I may mention acute inflammatory conditions of the respiratory tract and tropical abscess of the liver as two such. In the case of acute bronchitis, for example, the last thing you would do would be to put the patient into a dry, cold room; on the contrary, you surround him with a warm, moist air, and by that means unquestionably you promote secretion, and secretion is the correlative and complement of cell growth. The case of tropical abscess is more open to dispute, but it is taught by many of the ablest of those who have practised in hot climates that acute hepatitis—and its consequence, abscess—is the fate of those chiefly who imbibe freely of alcohol. Now we know that in England alcoholism never leads to hepatic abscess. I do not wish you to suppose that the fact admits of no other interpretation, for abscess of the liver of all kinds, solitary as well as multiple, are considered by some to be the result of portal pyæmia, secondary to dysenteric ulceration of the intestine; but it is a favourite idea of mine that the tropical abscess is an illustration of this forcing action upon the hepatic cells, the hot-house favouring the luxuriant cell growth of abscess, while the temperate or cold-house cultivates the hardy perpetual that we know as cirrhosis.

And still asking your attention to the primordial cell, have you ever attempted to apply the law of variation, as it occurs in all plants and animals, to it? If its natural outcome be not tumour growth, it comes very close to it. As a matter of experience, we know that all of us are not equally liable to

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develop these new growths. The tendency lies in particular strains, not as yet fully determined or understood. But my point is this: given the weakening of the restraining something, whatever that may be, which keeps the various parts of the complex organism is harmonious correlation, and by the simple laws of variation one could build up an explanation, a pathology therefore, of what still perplexes us and is likely so to do—the growth of tumours. As part of the same line of thought, too, think of the possible effect on the tissues of an excess of nutriment—a cause of monstrosities in plants, is it less so when we come to deal with the animal world? Supposing any part—take a gland cell from the breast for example—has a food supply for long in excess of its requirements, may we not have then, only supposing again some slight deficiency in the safety-valve, the first starting point of a tumour?

The question of the harmonious correlation of the various parts of the body, as necessary to the maintenance of health, is indeed a fundamental one, and numerous are the evils that may arise if the physiological balance be disturbed. One of the best illustrations perhaps of this is to be found in the curious overgrowths of fat and connective tissue that are occasionally seen in males in whom the sexual organs have failed to develop; another in the abnormal growth of hair which is sometimes associated with a similar arrest of development in females. I am myself disposed to think that the mental defect of the cretin with the associated overgrowths of fat that are present in various parts of the body are also to be explained in a like manner, notwithstanding that just now the balance of investigation seems to indicate that these things may be due to some deficiency of function on the part of the thyroid gland. But a somewhat similar change occurs in young children whose intellectual development is arrested by the growth of an encephalic tumour. All these may, I think, be in part explained by such defective correlation as I have supposed. The idea may be in part brought home to you by taking as an illustration the traffic of a great city. Supposing that the roadway of London-bridge or Regent-street is up, we all know very well the congestion that results in the tributary conduits, and if the derangement continues for any length of time the trade along the route suffers, and other thoroughfares more easy of access reap the benefit. The analogy is not perhaps of the closest, yet in it may be seen something which applies to many conditions of disease. In the case I have already quoted, I see the body furnished with what, for our present purposes, may, I think, be called a *constant* supply of pabulum. If the brain or the sexual organs, or any other part you like to mention, is working at low tides, or not at all, by some complete arrest of development, the common fund is replete with material that should have been removed, and other parts get the best of it, or worst of it, as the case may be, according as the other man's scraps are to them refuse or luxuries. Another fact of the same kind, and to my mind accepting the same explanation, is that when some large part of the body has been removed, chiefly the lower limb at the hip joint, there has been noticed a tendency in some cases to the growth of an excess of fat. Again, it is the practice with many surgeons, and unquestionably a sound one, not to do any severe operation without first having the patient quiet and in bed for some few days. Because it has been found that a preliminary treatment of this kind is more favourable to the prevention of any subsequent inflammatory processes in the wound, and therefore to the promotion of recovery. I should venture to interpret this practice after this fashion: Without the preliminary enforced rest the circulation is likely to be vigorous; the nutrient supplies abundant; the changes active. Inflammatory processes would under such conditions have from their point of view a good time of it, and probably run to excess. Whereas in the state induced by quiet and moderate nourishment the supplies are all kept well in hand, and any reactionary demonstration is deprived of its spirit by being starved of its food.

There are two other circumstances in surgery which occur to me in corroboration: one, that what are called primary amputations—that is, those done in full blood for injury—are much more dangerous than those done for disease; the other, that operations in old people often do remarkably well in respect of the local conditions. I have seen the edges of incisions for hernia in old people lie together and unite, as I have often thought, from sheer want of pluck, so to speak, to resent the injury. And if you think I am making much of very little in saying all this anent disturbances of correlation, ponder this passage from the "Autocrat of the Breakfast-table" and follow its pathological lead: "It is a good sign to have one's feet grow cold when he is writing. A great writer and speaker once told me that he often wrote with his feet in hot water; but for this all his blood would have run into his head, as the mercury sometimes withdraws into the ball of a thermometer."

Well, then, for my part I like sometimes to press this analogy between high life and low life still further, and to carry back one's idea of education and training until they converge on the rudimentary unit. May we not say that in the influence of one cell badly bred and badly trained upon the "habits of good society" (in cell life) we have another idea of the nature of that inexpressible something we call malignancy? Bad education allows of the formation of bad habits; and there are few more interesting lines of thought than that suggested by the diseases of faulty habit. Possibly I may enter more fully into this subject in another lecture. For the present purpose I will only say that a recognition of what we call "habit" is not out of place even in attempting to unravel the processes of cell life, and that, whatever be the organ or the tissue from which we take our cell, it is true—first, that stimulation leads to the exercise of function; and next, that the more frequent, short of exhaustion, the one, the more immediate becomes the response of the other, until at last a response is apparently elicited by stimuli that are quite insignificant as compared with those which called it at first into exercise.

Take two illustrations, most instructive in their differences—the nerve cell and the gland cell. The one, accustomed to action by means of discharge of nerve force, passes on in pathology through various stages of aberration into insanity. What of morbid anatomy have we there? The gland cell, on the contrary, uses up its stores of energy in the formation of fresh cells, and represents its storms by the number of these and by their form. But, as I have already said, each for each, the insanity and the secretion, or what represents it, are equivalent expressions. Surely in this lies in part an explanation of the proneness of certain tissues to grow out of bounds; of the exceeding rarity of tumours in some parts. New growths of true nerve substance (not of their cement or connective tissue) are very uncommon; and I think one might, *a priori*, from considerations of this kind have expected them so to be. For if it be true that the discharge of nerve force be the fundamental endowment of nerve cells, these must needs more readily manifest disturbance in the direction of their accustomed *habit* than in that of proliferation to which they are unaccustomed; and by the same argument the epithelial cell, knowing nothing of the tortuosities of lunacy, is liable to expend its abnormal energies in the folly of the growth of tumours. But, further, we know that what is a mere acquired habit in one generation may become by inheritance a fixed or constitutional action in another. The most direct evidence of this perhaps is supplied by some well-known experiments by Dr. Brown-Séquard upon guinea-pigs. He first made them epileptic and then paired them, and, as a result, produced an epileptic family, showing the same tendency to convulsions as their parents, although they themselves had been subjected to no lesion of any kind. It seems fair to assume, with an example of this kind before one, that there is no great improbability of the transmission of a habit when the conditions are apparently all simplified down to a most rudimentary one of the impress of a similarity of functional exercise by the parent cell on its progeny. But I take it as additional evidence that facts go to prove that in a long course of years a race of madmen or criminals may be produced. Insanity has no right to be considered in all cases as a sudden explosion, which, once happening, no one knows why, is likely to crop up again both in the individual and his offspring. Insanity is no doubt, in many cases, if we could but trace the phases of progress of individual minds, the expression of a slow process of neglect of training, just as much as any masterpiece of mental work is but the topstone of an elaborate and persistent purpose. And what more hopeful view could be taken? In the one case a man is the sport of a predestined fate; in the other he is to some extent the moulder of his own destiny. Madness, I say, is in many cases the result of the unchecked specialisation of nerve discharge along demoralising lines; a tumour is the climax in cellular pathology to a long indulgence on the part of cells in ill-assorted pairing, or what represents it in that low order of creation. The process starts in one cell,

is transmitted to the next, and so on, the primary variation becoming ever more marked. And when investigating any chronic disease from this point of view, who can tell how many generations have passed by and left their mark? Yet obviously, if it be accepted as a recognised fact that in the reproduction of the species there is a tendency to the gradual formation of varieties, which by a process of natural selection are liable to become permanent, we cannot refuse to acknowledge the existence of such a tendency in the primary elements of the organism. If the whole varies, its parts will vary, and then I apprehend there will probably be some such process amongst the cell element of our tissues which may correspond to what Darwin described as the "survival of the fittest." The cell varies under existing conditions because those local conditions have been favourable to, one might well say, have compelled variation; and the result being that best adapted to the environment, supposing this to be constant, will tend to be perpetuated. It would seem a strange paradox that such beggarly elements as compose a malignant tumour should constitute an example of the survival of the fittest, yet such in a limited sense, and confining ourselves strictly to a pathological aspect, they may be said to be. This may seem a fanciful idea and one of no practical value, but yet it may possibly help you, whether by attraction or repulsion no matter, so to arrange your own thoughts as shall enable you to discern, each in your own way, something of the nature of what is called malignancy.

Having suggested a cognate subject, let me now deal with it a little more in detail. It is an old and favourite idea with me that secretion and growth, in the case of glands, may to some extent be correlated and convertible. It is an interesting feature, at any rate, of glandular pathology that the development of tumour centres round the epoch of ripening into maturity, and that when the heyday of function has passed. Furthermore, there would seem to be a tendency on the part of glands that for one reason or another have never fulfilled their own longings to produce morbid growths; and there is likely to be some correspondence between the rapidity of the growth and the activity of the processes going on in the body or in the part at the time of its development. Now, what is secretion? May we not call it a modified growth? It is yielding up of themselves on the part of the gland cells to the production of a highly specialised material necessary to the economy, and it is surely very suggestive that gland tissue, before it arrives at this self-sacrificial stage of unconscious martyrdom, should sport or revert to some less specialised production. Accustomed to periodic affluxes of excess of nutrient supplies and to equivalent discharges, when the demands cease to which these discharges answer, the unutilised energy is appropriated to other ends, or rather stimulates the gland cells to other processes. And one may well suppose that this will be still more the case when, with an energy and potentiality for a still higher development, they have never been taxed at all. It is thus, to my mind, that we have the cancer of the mammary gland in the female never pregnant or after childbearing has ceased, the sarcoma of the undescended testis, the soft and rapidly growing cancers of childhood, the hard and withered cancers of the very old.

Take another aspect of my subject—viz., the influence of position in determining disease—and see how it leads round to much the same goal as that we have already arrived at. In times gone by—gone by, did I say? I had rather said to the sobered judgment of age—the innate tendencies of the individual, "the constitution," to adopt the popular term, seemed the more worth attention. The impulsiveness of youth would fain localise everything, for by that means chiefly can a dashing victory be won. But do not forget that the good generalship which gains the end, while averting the battle, though less conspicuous, is the greater feat of training and of skill. You may sometimes hear it said of yourself or someone else: "Dr. A. is very clever, but he is so young. I prefer old Mr. B.; he knows my constitution." Don't resent it; it is unlettered, perhaps, but it is sound pathology. Nevertheless, just now I would press home not the constitution so much as the importance of the consideration that in many, perhaps most, diseases there is a local factor which is a good deal concerned in the building up of any sound pathology of the particular affection. I will take a few of my favourite examples, and syphilis to begin with. Late syphilis is not symmetrical. But it is a constitutional disease, say some, and therefore it ought to be. Mr. Hutchinson gets out of this difficulty by suggesting that, originally an all-pervading disease, it ceases to be so after a time, but that relics remain in this part and in that, and that these local germs may prove troublesome years after the original malady has subsided. Recent observations, which go to prove syphilis to be a germ disease, have, I think, done something to render this hypothesis a probable one. Moreover, there is a somewhat similar sequence of changes in typhoid fever, where certain local inflammatory formations are liable to appear during convalescence. But there is another explanation which I prefer, and it is this: Once syphilised, alway so; at any rate, so long as late evidences of it show themselves. It is precisely on all fours in this respect with scarlatina and variola. In any one of them you may have the disease a second time, but if you do, *you* are the peculiarity, not the disorder. We do not know what happens, but we say that these diseases as a rule exhaust the soil, and all the tissues thenceforward are bred up to the altered standard. But the alteration is invisible with scarlatina and variola, and there is an end of the matter. But syphilis is peculiar—its type is the invisible portrait—breathe on it and out comes the donkey. If a man has had syphilis and he happens to be your enemy, and you, although a doctor, be sufficiently political to be adequately lost to everything but your own ends, advise him to take a six months' course of hard training and aquatics, and he will probably come back to you with an aneurysm of the aorta; or bid him live freely both in eating and drinking, and he will worry his liver into what is called gummatous cirrhosis. A judicious kick at football may land him in a periostitis of his tibia, and so on. Forgive the flippancy, but I want to drive home this thought, that syphilitic inflammations do not burst out haphazard, but that when we find the cellular membranous sore below the patella, the gumma in the testis, the aneurysm of the aorta, the thrombus in the brain, these things come to such parts as receive injury, or are overworked, or are stimulated to resentment by some persistent irritation such as alcohol is to the liver. A beautiful illustration of this occurred in a case that I admitted a year or so ago, in a man with a much enlarged liver. He died soon after his admission, and Dr. Pitt, on making the post-mortem examination, found a huge gumma in the liver, and in its centre an old hydatid. There could be no question that the hydatid had provoked the gumma. You cannot, it is true, always put your finger on the exciting cause. The "why" of a gumma in the brain is a very difficult question to answer to the satisfaction of one who will not go further than he can see. Nevertheless, I will not lose the opportunity of insisting that this local provocative is a most important item in the pathology of late syphilis, and this is corroborated by Sir James Paget's statement that late syphilis is infrequent amongst the upper classes. This means, I take it, that in the well-cared-for, the well-to-do, the free from worry, in those who lead less laborious lives, &c., the local factor is reduced to a minimum. Thus I would say that, when a man has had syphilis, pathology teaches that he should go softly. He has in a measure used up early the margin of the vital capacity of his tissues, that margin which endows man with his ever bubbling energy, which gives him the true pleasure of living. He must pay the penalty, and live henceforth a more confined existence; he must live by rule, and haply thereby he may still live a useful life. If not, he must take the risk; excess will shrivel his skin, will bleach his hair, will dull his brain, will further the processes of disintegration which the initial energy of his being has now no longer the power to stop, and by insidious paths the eye cannot trace will send him back to dust a wasted life.

But this is rather diverging from the main question now before us, so let us take the case of the aorta—indeed, of all the vessels; their pathology is the outcome of their position. I have often said before that there would be but little atheroma of the arch of the aorta if it ran in a casing of plaster-of-Paris. The diseases of arteries are due in the main to the wear and tear to which they are subjected, and if you study the anatomical arrangement of the vessels you will be able to say what are the points on their route most open to aneurysm. It is the main trunk of the aorta which suffers most, and the arch, which bears the brunt of the impact of the blood, most of all. But the occurrence of aneurysm on smaller vessels is not less instructive, for it occurs at the cœliac axis, in the popliteal space, in the groin, &c., all of them points where either the stream splits, or the movements of the part subject the vessel more than elsewhere to

chances of injury or friction. There are, besides, atheromatous vessels elsewhere far too instructive to be passed over: there are those of the brain. Once more let the Autocrat point you to a pathology: "The men of genius that I fancy most," says he, "have erectile heads like the cobra-di-capello. You remember what they tell of William Pinkney, the great pleader; how in his eloquent paroxysms the veins of his neck would swell, and his face flush and his eyes glitter, until he seemed on the verge of apoplexy. The hydraulic arrangements for supplying the brain with blood are only second in importance to its own organisation." And I would add, when we consider its own organisation in a more anatomical sense than the author alludes to, that it and they together explain the frequency of apoplexy. The advantages of the one entail the risks of the other. Take, again, the vessels in the lung. No one would require to be instructed in the cause of hæmoptysis when he can see for himself in the post-mortem room that it is nearly always due to the existence of a cavity in the lung and to a bulging of a vessel in its wall, which has lost its support and become diseased. And once more: atheroma of the pulmonary artery but seldom occurs, and when it does it is always in association with some pulmonary stasis which has necessitated undue distension, and therefore strain, of the affected vessels.

I dwelt last year upon the meaning of the spread of phthisis in the lungs—how largely it depended upon the disadvantages of locality. I shall by and by have to say something upon the importance of the same line of thought in considering the morbid anatomy of the stomach and intestines. I shall, however, only say now, and as carrying us back to our earlier contention, that there are numberless instances in these regions, of disease originating in parts that, altogether on *a priori* grounds, one could say are likely to become diseased. Further, there is a considerable amount of evidence to show that in some of these there is a life history of cell growth such as I have attempted to sketch—a passage apparently of simple healthy toned cells, by various stages, into malignant cells. Time fails ere I have supported this hypothesis by appealing to definite lesions. I had intended to take a form of disease of the tongue which may be called simple hypertrophy, and another, a chronic ulceration of the tongue, and from their common goal in cancer to fill in the gaps left by the defects of the pathological record in a scheme of malignancy such as this: that healthy physiological type is constantly owning departures in small degrees; that these variations, if the cause of departure continue, not only become persistent, but generation after generation (in cell life) much more pronounced, until at last a time comes when the family likeness is altogether lost. I cannot put it better than I did some years ago, in Dr. Maudsley's words, "that the criminal class constitutes a degenerate or morbid variety of mankind. They are, it has been said, as distinctly marked off from the honest and well-bred operatives as black-faced sheep are from other breeds, so that an experienced detective officer or prison official could pick them out from any promiscuous assembly at church or market. They herd together in our cities in a thieves' quarter, giving themselves up to intemperance, rioting, and debauchery, without regard to marriage ties or the bars of consanguinity, and propagating a criminal population of degenerate beings." Is not this the life history of a cancer? Aided by the light of such morbid sequences as I have mentioned, we can see first the gradual formation of an atypical race of cells, and next a succession, ever becoming more renegade, until at last the ties which bind them to the tissue are discarded altogether—they have denied (amongst cells) their social obligations, to live the short life and the merry one of the profligate.

I started by saying that pathology is the natural complement of physiology, and to that end have been endeavouring to depict by means of familiar analogy the life history of a single cell as it may be supposed to run, on one of the highways of pathology, from the cradle to the grave. But pathology is far reaching in its embrace, and a cellular pathology such as this, however attractive, is no more than a small part of the extent of the study. To be able to explain even such a limited part of it as we have to-day concerned ourselves with, you will require to know something of embryology and of comparative anatomy and pathology. There are tumours which, having regard both to their position and their structure, can only be explained by a knowledge of these. Another large branch of pathology, which in the present day is assuming the most bewildering proportions, depends upon a knowledge of the life history and behaviour in the tissues of parasites. And yet again there is the most fertile and inexhaustible field of physiological and pathological chemistry waiting for workers, and far too little heeded by the morbid anatomist.

But I must draw to a close. Let me say of the subject in general before I end that instruction is in the main conducted on one or other of two lines—the suggestive or the dogmatic. Pathology as I have put it before you to-day is the one; morbid anatomy fundamentally the other. But no rule is absolute, and both these assertions require important qualifications. It would be a sorry climax to this morning's labour, yours and mine, were you to go away with the idea that the one was interesting, no doubt, but highly speculative and unpractical; the other a string of dead facts with little to enliven them. This, unfortunately, is the thought of many who have paid no attention to the subject. And it is a criticism on morbid anatomy that you will often hear that it gives you no aid in treatment. Supposing that this were literally true in the sense that is meant, I would still not admit for an instant that its study were valueless, for study what you like, so long as you do study it, any investigation is instinct with instruction in all manner of ways that the ignorant man never dreams of. It is thus particularly with histology. There is certainly no very evident relationship between the study of histology and the treatment of disease, yet I shall make bold to say, as a matter of personal experience, that it will offer you hints and suggestions in this respect that one would not conceive to be possible until one had experienced them. It is, indeed, impossible, that you should give thought to any morbid change and acquire knowledge concerning the actual conditions that exist, without acquiring also some ideas which concern themselves with its treatment. Be they but few, they must at any rate be more than that man possesses who has not a notion, or an entirely imaginative one, of the changes that have passed or are passing. The point would not be worth argument were it not that those are wont to make much of it who for every disease and every symptom vaunt their knowledge of a drug wherewith to scotch it. Let me, then, say to you, with all the earnestness of the most complete conviction, that while the neglect of the study of morbid anatomy and pathology tends dangerously towards the exhibition of temerity when there is need for caution, of hesitation when one should be bold, of quackery in place of the line of light and leading which it is ever our highest function to assert, the knowledge of it will make you not only exact, but skilful and ready, as good pilots amid the shifting quicksands of disease.

ABSTRACT OF A

Clinical Lecture

ON

SPINA BIFIDA OCCULTA, AND ITS RELATION TO ULCUS PERFORANS AND PES VARUS.

BY J. BLAND SUTTON, F.R.C.S.,

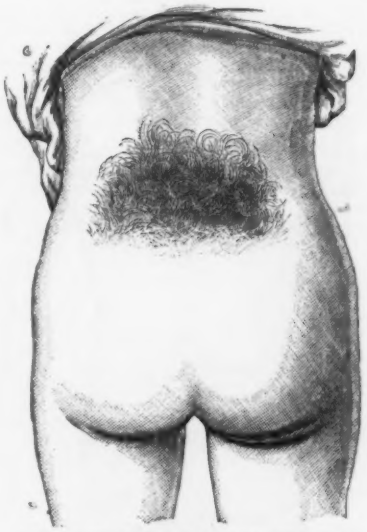
ASSISTANT-SURGEON TO THE MIDDLESEX HOSPITAL.

GENTLEMEN,—The term "spina bifida occulta" is applied to a defect in the arches of the vertebræ, such as occurs in the commoner forms of spina bifida, but no tumour or cyst appears externally. The deformity is, however, accompanied by some remarkable external conditions and complications, which are interesting from many points of view. For the term "spina bifida occulta" we are indebted to Virchow; the history of the matter runs somewhat as follows:—

In the year 1875 Dr. Bernhard Ornstein of Athens communicated to the *Berliner Gesellschaft für Anthropologie* an account, with a photograph, of a Greek soldier whose loins presented an abundant crop of long hairs. The hairy growth occupied the middle line of the back, and extended thence on each side. The hairs were so long, that the man found it necessary periodically to cut them, in order to prevent interference with defæcation.

A few months later, before the same Society, Virchow, referring to that very curious phenomenon, or law of duplicity of cases, stated that on the morning when he received the letter from Athens regarding Ornstein's case, there was a subject in the pathological institute which presented an unusual hairiness of the back. It was the body of a woman, aged twenty-four years, who died from peritonitis after typhoid fever. The position of the hairy spot, and its general shape and appearance, may be gathered from Fig. 1. The patch measured ten centimetres in diameter, and the hairs, which were blonde, measured from six to seven centimetres in length. The skin at this spot appeared normal. A closer examination of the part revealed the following important facts. The hairy patch corresponded to a depression which could be felt in the spine, and on removing the skin a spina bifida occulta was discovered. The spinous processes of the upper sacral vertebræ were replaced by membrane. The arches of the four lower lumbar vertebræ were incomplete, thus giving rise to a fissure, which was filled by a kind of fibro-cartilage. Virchow[1] further expresses the opinion that this collection of hairs differs from moles in ordinary, and ought to be regarded as the result of

FIG. 1.



A case of spina bifida occulta. (After Virchow.)

local irritation, due to disturbance during the development of the spinal column.

The next case was published in the *Deutsche Zeitschrift für Chirurgie* (Bd. xvii., p. 1), by Fischer of Strasburg. It occurred in a girl aged nine years and a half. This child, as will be seen from Fig. 2, presented in the loin a hairy patch of irregular shape. The hair was of a brown colour, and varied from five centimetres to fourteen centimetres in length. The skin from which the locks grew was normal in colour and thickness. The eye, however, detected an abnormal depression of the spine in this spot. Manipulation revealed the fact that the spinous processes of the second and third lumbar vertebræ were curved, and deviated from the middle line. The spinous process of the fifth could not be felt, and the finger detected a fossa in this situation. At the angle of the scapula there was a small dark-brown but hairless pigment spot, and a similar one existed to the right side of the spine a little above the hair-field. In the neck, between the third and fourth cervical vertebræ, was a lock of long hair (seventeen centimetres), the skin was normal, and the vertebræ in this situation did not present anything pathological. The girl also suffered from chronic ostitis of the metatarsal bones of the left foot, which was also in a more or less anæsthetic condition. To remedy this, Chopart's amputation was performed. The foot was examined and reported upon by Recklinghausen. The report is published at length

[1] Zeitschrift für Ethnologie, 1875; and Berlin Klin. Woch., 1884, p. 747.

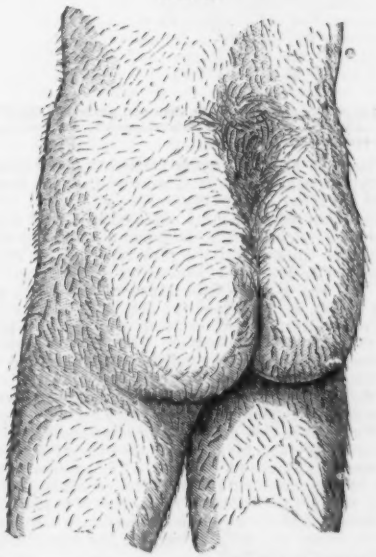
in Fischer's paper. The most noteworthy change was found in the arteries. Their walls were hypertrophied, especially the muscular layer. There was endarteritis and an obliterating thrombus in the main trunk of the plantar artery. This last complication is of some importance in connexion with the remarkable case now to be mentioned.

FIG. 2.

A girl with spina bifida occulta in the lumbar region, accompanied with hypertrichosis. There is also a lock of hair in the cervical region. There was also ostitis of the metatarsal bones of the left foot. (After Fischer.)

Von Recklinghausen[2] reported the details of the post-mortem examination of a case of spina bifida occulta. The

FIG. 3.



Abnormal hairiness of the loins, due to the irritation of a spina bifida occulta. (After Recklinghausen.)

report is accompanied by a careful description of all the parts concerned. There was marked lumbar hypertrichosis, as shown in Fig. 3; and, in addition, the patient, a man aged

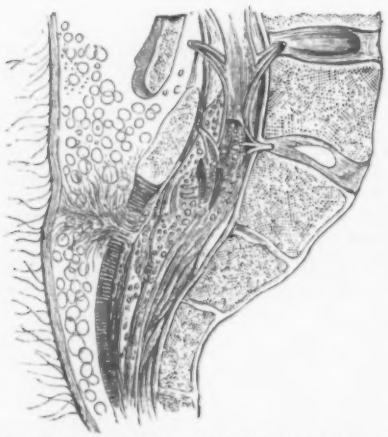
[2] Virchow's Archiv, Bd. cvi., 1886; and Untersuchungen über die Spina Bifida. Berlin, 1886.

twenty-five years, suffered from club-foot and a neurotic ulcer (mal-perforans) of the left foot, accompanied with anæsthesia. For this trouble amputation was performed by Fischer, but the man only survived the operation a few days.

At the post-mortem examination it was found, on bisecting the spine, that the cord extended lower in the canal than usual. Instead of terminating at the second lumbar, it ended at the second *sacral* vertebra. Lying in the canal, between the fifth lumbar and first sacral vertebræ, was a lipoma. It was situated within the dura mater, but communicated by means of a rounded orifice with the general tissue of the lumbar region, as represented in Fig. 4. On microscopical examination this tumour was found to be composed of fat and striated muscle fibres. The individual fasciculi strongly resembled the arrangement found in the multifidus spinæ muscle. In this instance, as in the preceding case, Recklinghausen found no changes in the nerves of the foot on microscopical examination; but there was hypertrophy of the muscular layer of the arteries, visible in the cut sections of the tissues of the foot in the immediate neighbourhood of the ulceration; the intima was normal.

Perhaps one may here digress, and draw attention to the valuable light such a case as this throws upon those tumours, composed of fat and striated muscle fibre, which have been found beneath the dura mater implicating the spinal cord. For a typical case of this kind reference should be made to the one described by Dr. Gowers.[3]

FIG. 4.



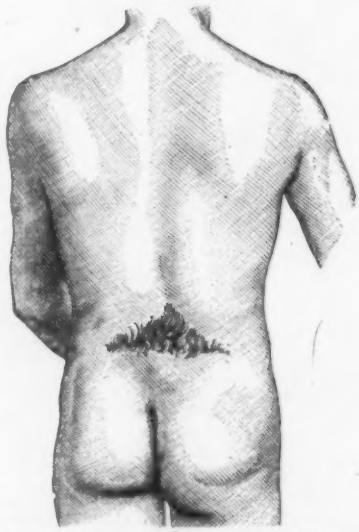
Longitudinal section of the abnormal portion of the spine in Fig. 3. The defective arch belonged to the first sacral vertebra.

The relation between spina bifida occulta with congenital lumbar hypertrichosis, club-foot, and perforating ulcer, has been further illustrated by a case reported by Dr. Conrad Brunner[4] of Zurich. This patient was a man, aged twenty years, and the general appearance of the hairy patch is shown in Fig. 5. He presented similar clinical conditions to the cases already described, and, as in the two preceding ones, the foot was amputated. The patient survived the operation, therefore the condition of the spine remains uncertain. Manipulation, however, revealed the existence of a defective spine to the first lumbar vertebra, and a depression corresponding to the hairy region. The amputated foot was in this case carefully examined by Professor Klebs of Zurich, and his report of the dissection is embodied in Brunner's account of the case. Klebs refers to a hyperplasia of the muscular layer of the arterioles, and details certain changes presented by the nerves of the affected foot. The changes described by him are certainly consonant with the symptoms, and help to explain the anæsthesia which was observed in the foot.

As far as my knowledge of the literature extends, the preceding are the four most important cases that have been recorded; the remainder were detected in fœtuses, and are described in Recklinghausen's memoir before quoted. My attention was first directed to this matter when engaged recently in studying spina bifida, but more especially on account of the subtle inferences of Virchow, when he uses these cases to explain the tuft of feathers on the head of the Polish fowl and the underlying cranial defect, as of the nature of a transmitted pathological condition, the tuft of feathers being analogous to the growth of hairs in the loins in spina bifida occulta. The conditions are alluded to and illustrated in THE LANCET of Feb. 26th, 1887. I have for some time been on the watch, and have examined many patients with the hope of detecting one of these cases. At last, through the kindness and courtesy of Mr. George Lawson, I have been enabled to study one of these interesting patients.

Three years ago Elizabeth ——, aged fifteen years, was admitted into the Middlesex Hospital under the care of Mr. George Lawson, suffering from an ulcer on the sole of the foot and caries of the metatarsal bones. At that time the patient stated that she had always suffered from cold feet, and regarded the ulcer as a chilblain, which had existed for several years. The foot was removed at the ankle joint by Mr. Lawson after Syme's method, and the girl made a good recovery. The case at the time struck me as being peculiar, and I subsequently made a careful dissection of the foot.

FIG. 5.



Lumbar hypertrichosis associated with spina bifida occulta. (After Brunner.)

Compared with its healthy companion it had a stunted appearance, and presented a minor degree of varus. The toes were short and stumpy, and at the ball of the foot was a circular ulcer with thick and callous edges. At its base a fistula was found which led to a carious metatarsal bone. All the tarsal and metatarsal bones were full of semi-fluid fat, their compact tissue being exceedingly thin. I heard no more of the girl until May, 1887, when she was brought into the operating theatre for reamputation of the stump. The base of the stump presented an ulcer of the size of a crown piece, and about a quarter of an inch in depth; the edges were callous and suggested to those who had charge of the case ulceration from pressure. Being fresh from the study of spina bifida, the whole history of the case was suggestive of spina bifida occulta, and in company with Mr. Browne, the house surgeon in charge of the case, I made a critical examination of the girl's spine. This is what we found: On the right side of the loin is a deeply pigmented wart. On counting the spinous processes of the vertebræ downwards, they all follow regularly until the lumbar region is reached; then they deviate to the right side. Instead of prominent spines, the finger feels a flattened but fairly firm tissue until the third or fourth lumbar arch is felt; at this spot an irregularly rounded depression covered with mem-

[3] Pathological Society's Transactions, vol. xxvii., p. 19.
[4] Virchow's Archiv, Bd. cvii., S. 494.

brane is detected. Upon pressing this the girl evinces signs of pain and resents the manipulation. On asking the patient to bend forward, we found that the loin remained quite flat, and did not present the ridge, or prominent row, of spinous processes normally seen in this part of the back. Further, on glancing laterally across the loin the eye at once detected an abundant crop of fine downy hairs, radiating from the soft point in the vertebra as from a centre. These downy hairs are not conspicuous unless carefully looked for; they resemble the fine lanugo-like hair seen around the outer edge of a meningo-myelocele in an infant. From these facts it is clear that the ulcer of the foot, the varus, the condition of the metatarsals, and the ulceration of the stump must be attributed to the malformation of the spine; and that this girl has a spina bifida occulta which differs from the preceding cases only in the fact that the hairs are small, colourless, and inconspicuous, instead of being long and coloured. We must now consider the condition of the stump. The appearance of the ulcer on the apex of the stump has been already described, and need not further detain us. Portions of the anterior and posterior tibial nerves, arteries, and veins were removed as near as possible to their terminations, without spoiling the stump for museum purposes. The arteries displayed, as Recklinghausen has described, a marked increase in the size of the muscular layer. The posterior tibial veins exhibited an organised parietal thrombus. The posterior tibial nerve was the seat of extensive change. The fasciculi were separated by collections of fat, and in no part was healthy nerve tissue detected. The examination of the stump in this instance, however, can be only of secondary importance, because such changes may arise independently of any central lesion.

Six years ago, whilst preparing the spinal column of a child two years and a half old for teaching purposes, my attention was arrested by a curious deficiency of some of the arches. The specimen was preserved for future study. A re-examination of the specimen shows it to be an example of spina bifida occulta. The spinous process of the tenth dorsal vertebra is rudimentary, that of the eleventh is wanting, and the laminæ have failed to unite, leaving a gap in the spine, such as we felt in the spine of Elizabeth ——. The spine of the twelfth dorsal and first lumbar are rudimentary. There is also a similar but larger defect in the upper sacral region.

Conclusion.—The object of this lecture is to draw attention to these cases, in the hope that before long many more of these patients will be brought under observation. With a more abundant supply of material of this character we shall obtain valuable information regarding central disturbance and local lesions. Such knowledge as this is becoming daily more and more important, in relation to visceral nerves, especially those relating to vaso-motor fibres. The study of spina bifida occulta further shows that "mal perforans," like the term "locomotor ataxy," conveys no definite pathology, but serves as a convenient clinical expression for a set of associated symptoms.

REMARKS UPON A CASE OF CEREBRAL ABSCESS, FOLLOWING EMPYEMA, IN WHICH THE ATTEMPT TO TREAT BY OPERATION WAS UNSUCCESSFUL.

BY DAVID DRUMMOND, M.A., M.D.,
PHYSICIAN TO THE NEWCASTLE-ON-TYNE INFIRMARY, ETC.

AT a time when an unusual or novel, and especially a serious and momentous, method of treatment is on its trial, it is, I think, quite as important to place on record the unsuccessful as the successful efforts. Or I would go further and say that we owe it to the profession to make known the difficulties that may be found to beset a procedure not yet fully established, or, at least, not very often adopted. Of late the subject of brain surgery has been brought prominently forward by Hughlings Jackson, Hughes Bennett, Godlee, Victor Horsley, Gowers, Hulke, Macewen, Barker, Greenfield, and others, and the fact has been clearly demonstrated that sound surgical principles are just as applicable to the cerebrum as to any other organ. It is clear, however, that medicine and surgery must go hand in hand, as the site of the lesion must be fixed before it can be dealt with, and one of my objects in publishing the following case is to point out the difficulty and disappointment that may attend such an attempt.

M. T——, aged twenty-nine, a widow with two children, and by occupation a laundress, was admitted into the Newcastle Infirmary on Dec. 18th, 1886, complaining of pain in the left side of the chest and shortness of breath. She stated that her attack, which was ushered in by shivering, was of two weeks' duration. The only piece of information of any importance bearing on her family history was the fact that one sister had died of phthisis. Her own previous record showed typhus fever when a girl, lead-poisoning four years before her admission, when she was employed at a white-lead factory, and hard work with much exposure as a laundress for the past two years—i.e., since the death of her husband.

State on admission.—The patient was anæmic. The respirations were short and quick, 40 in the minute; the pulse was 120, soft and easily compressible; and the temperature was 100·4°. The tongue was coated. She complained of pain, of the ordinary pleuritic character, in the left axillary line, about the fifth and sixth ribs. The physical signs of effusion in the left pleural cavity were present—impaired movement, vocal resonance at base diminished, dulness absolute from angle of scapula downwards, distant sighing, tubular breathing, and so forth. The effusion, as shown by the hypodermic needle, was clear.

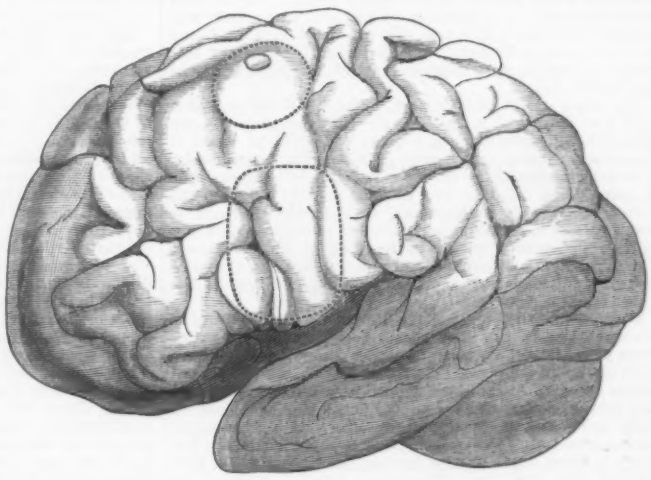
On Dec. 20th, two days after admission, a rigor with marked sweating occurred, the face became flushed, and vomiting and diarrhœa set in. The dulness was found to be increased, and well-marked Skodaic resonance was observed at the left apex, whilst coarse râles were audible in the right lung and upper part of left. The temperature was 104°, and the pulse 130. Next day pus was drawn off by the hypodermic needle from the left base, revealing the fact that the case was now one of empyema. It was also clear that the left lung was in a state of croupous pneumonia above the fluid at the back. For the next few days the patient's condition was most critical. She was exhausted with diarrhœa and vomiting, the pulse was 140 and exceedingly weak, whilst the temperature remained high. On Christmas Day it was feared she was sinking; the breath became excessively foul, she lost her voice, and the pulse began to fail. It was evident that pneumonia with bronchitis contributed largely to this unfavourable condition, and it was deemed unwise to attempt any operative interference until she rallied, especially as the physical signs suggested that the collection of pus at the base was not large. From Dec. 26th to Jan. 4th, 1887, distinct improvement was noticeable: the temperature sank, the pulse improved, the vomiting and diarrhœa ceased, and the general condition appeared to be much better. On the latter day, however, rigors and vomiting returned, the temperature rose to 103°, and the signs of a fresh pneumonia were detected. The symptoms again subsided, and by Jan. 10th her state was so far improved that it was decided to drain the pleural cavity. Consequently she was placed under chloroform, and an incision was made by Mr. Waldy in the eighth interspace, adjacent to the angle of the left scapula. Pus escaped and a drainage tube was inserted. The dressings employed were iodoform wool and carbolic gauze. The operation was done under the spray. Next day the discharge was fetid, and consequently the cavity was washed out with weak Condy. In a few days the pus became aseptic, when the injections were discontinued. The temperature gradually went down and the pulse and general condition improved. On Feb. 11th a rigor occurred, and once more the signs of pneumonia appeared, but this time in the left apex. The temperature rose to 104° and the pulse to 130. In spite of this the discharge continued sweet and the quantity remained small. In a week this attack subsided, and on Feb. 18th the drainage-tube was removed, as it was apparent that the little pus that escaped was from the tract in the chest wall. For ten days the progress of the case was most satisfactory, but on Feb. 28th there was a rigor followed by sweating, and the temperature, which had fallen to normal, went up to 103·5°. No physical signs of inflammation could be discovered in the chest, and for a time the cause of the disturbance was doubtful. On March 3rd, the temperature having again fallen, three fits occurred, but no accurate account of their nature could be procured. Then for three days nothing worth recording happened, but

on the 6th three more fits took place, and on the 8th there were two fits. The patient now complained of headache, which she said was most severe on the left side of the head, in the parietal region. On ophthalmoscopic examination both discs were seen to be blurred and the retinal veins distended—early optic neuritis. On the 9th two fits occurred at 8 o'clock in the morning. At 4.30 the convulsions returned and continued for some time. They were now watched for two hours by Mr. Waldy, who gave the following account of the attacks: 1st, twitching of the right eyelids; 2nd, conjugate deviation of the eyes to the right, followed immediately by the head; 3rd, twitching of the nostrils; 4th, drawing up of the right angle of the mouth (limbs flaccid); 5th, rigidity and spasm of the right arm; 6th, rigidity and spasm of the right leg; 7th, the left side of the face and the left limbs then became rigid and were affected with spasm; 8th, the whole body convulsed. Consciousness was lost during these fits, ten of which occurred one after another. The pupils were widely dilated and insensible to light. The tongue was not bitten. Occasionally urine and fæces were passed in a convulsion. After these ten fits there was an interval of two or three hours, and during this time there was conjugate deviation of the eyes and head to the left, and the right arm and leg were observed to be flaccid and paralysed, whilst the left limbs were rigid and resisted passive movements. Consciousness returned to a certain extent, but the patient was distinctly aphasic, and though she appeared to recognise what was said to her, was unable to reply to questions. After this one or two more slight convulsions occurred, and, as far as they went, were repetitions of the previous fits; indeed the march of the convulsions was reproduced in a most constant and regular way. Though the temperature had fallen and remained about 99° during the previous few days, it was feared that an abscess had formed in the brain, and, as the convulsions pointed to the left motor area, it was decided to trephine in this region.

Operation (performed by Mr. Waldy).—The head was shaved and washed with turpentine and carbolic lotion (1 in 20). A quarter of a grain of morphia was administered hypodermically, and chloroform was employed as the anæsthetic. The fissure of Rolando was then marked out, the upper limit of which was taken to be half an inch posterior to the centre of a line connecting the root of the nose with the occipital protuberance, whilst the lower limit was fixed at a point half an inch above the posterior extremity of a horizontal line drawn two inches and a quarter from the external angular process of the frontal bone. A semilunar incision was now made, and a flap dissected downwards, so as to expose the skull, corresponding with the lower half of the fissure. A circle of bone was then removed in the usual way over the lower end of the ascending frontal convolution, a second circle was removed an inch higher up, and the intervening bridge of bone was sawn out by Hey's saw. At the upper part of the aperture thus made the dura mater appeared to bulge rather prominently, and at this point a hypodermic needle was introduced into the brain, but only red serum was drawn off. A branch of the middle meningeal artery was now ligatured in two places and divided, and the dura mater was incised and reflected back so as to expose the arachnoid. This membrane bulged distinctly at the lower part of the wound, being pressed out by subarachnoid effusion; here, also, the hypodermic needle was introduced and serum drawn off as before. The pia were evidently much congested, and this was most noticeable in the neighbourhood of the effusion. A third circle was now removed just in front of the lower part of the bony aperture, exposing the posterior part of the inferior frontal convolution; but, with the exception of the subarachnoid effusion, nothing abnormal was seen. In three different situations the needle of the hypodermic syringe was introduced, but no pus cavity was tapped. The arachnoid was incised, when a considerable quantity of serum escaped. The dura mater was now stitched with a continuous catgut suture, the lower part of the wound being left open for drainage. Two drainage tubes were introduced beneath the dura, one at each lower corner, and the wound was washed with a solution of perchloride of mercury (1 in 200). Carbolised dressings were employed, and the whole operation was done under the spray. The moderate amount of bleeding that occurred from the surface of the brain was easily controlled by the pressure of a sponge.

On March 10th, a day after the operation, the patient was conscious, was able to speak, and there was no paralysis. The temperature was 99°, and the pulse 120. A large quantity of red serum was found on the dressings. There was no tension of the wound.—11th: Temperature 98·8°; pulse 120; able to speak; no paralysis.—12th: Temperature 101°; pulse 140. Patient delirious. Wound dressed, and again a free discharge of serum; no tension; drainage tubes shortened.—13th: Temperature 102°; pulse 130. Delirious and noisy; wound nearly healed; no pus; discharge quite sweet; no tension; the posterior tube removed.—14th: Observation the same.—15th: Temperature 103°. Able to speak; walked about in her delirium, which was less violent; no paralysis; wound healed.—17th: Delirious and unconscious.—18th: Temperature 105°; pulse 140. Still delirious.—19th: Temperature 107° at 6.30 A.M. Death at 10 A.M.

Post-mortem examination.—Slight œdema of the lower extremities; body somewhat emaciated; rigor mortis present.



The wound above the left ear was healed, and on tearing open the flap a small patch of purulent lymph was found on the under surface. The opening thus exposed in the skull was two inches and three-quarters long, and an inch and a quarter wide at the widest—that is, the lowest—part. On raising the skull-cap and dura mater and exposing the brain, two or three small patches of yellow lymph were found on the surface of each hemisphere, but there was nothing like diffuse meningitis. The aperture in the skull made at the operation corresponded with the lower third of the ascending frontal convolution, the adjacent part of the ascending parietal, and the posterior fourth of the inferior frontal. At the lower part of the ascending frontal convolution the pia mater was a little thickened and adherent, but no pus was seen. The posterior part of the middle frontal, where it joins with the ascending frontal, stood out prominently, and appeared to be about three times the size of the normal convolution. The pia mater was adherent to the upper part of the swelling, and an attempt to remove it tore the cortex and allowed pus to escape. A section through this portion of the middle frontal convolution revealed an abscess the size of a large hazel-nut, containing thick greenish pus. This abscess cavity approached the surface at its upper part, where a thin layer of grey matter separated the pus from the pia mater, but from this point it passed downwards and inwards, and at the middle of the prominence was nearly three-quarters of an inch from the surface. Surrounding the abscess was

an area of soft œdematous brain matter. The lower half of the left pleural cavity was obliterated, but there was not the slightest trace of a pus cavity, and the pleura was not materially thickened. Some congestion of the lung was detected, but the right was in the same condition. The remaining organs were healthy. (See Engraving.)

A more satisfactory result in a case of empyema could not well be obtained, and a more disappointing termination to a case of abscess of the brain could scarcely be conceived, for, as a glance at the accompanying drawing (taken from the brain as it lay on the post-mortem table by Mr. C. Steenberg) will show, the upper limit of the aperture in the skull made by Mr. Waldy's trephine was very close to the level of the lower part of the abscess. I was led to expose and explore the lower part of the ascending frontal convolution and the posterior extremity of the inferior frontal on account of the early implication, in the course of the convulsions, of the muscles of the mouth and right arm and leg. I fear that I under-estimated the importance of the phenomena at the commencement of the fits—viz., the twitching of the eyelids and the deviation of the eyes and head to the right; and this I was led to do because of the frequency with which the spasm in ordinary non-organic epilepsy commences with deviation of the eyes and head to one side, a fact with which all are familiar. But the condition of the patient after the fits ceased also aided in determining the site of exploration. It will be recollected that the post-epileptic phenomena were conjugate deviation of the eyes and head towards the left side (side of lesion), aphasia (even after consciousness had in a great measure returned), and paralysis of the right limbs, especially the arm. Here, again, the conjugate deviation was neglected, as we are unable to attach any localising importance to it in ordinary hemiplegic attacks, and hence my impression that the lesion would be found in the neighbourhood of the arm, mouth, and speech (?) centres, or, in other words, in the lower half of the ascending frontal and the posterior part of the inferior frontal convolutions, or at least about the lower part of the fissure of Rolando. The error of this conclusion was made sufficiently obvious at the post-mortem, for, as will be seen, the abscess was really situated in the posterior part of the middle frontal convolution—the centre for lateral movements of the head and eyes (Ferrier). I need scarcely point out that in the case before us the attempt to diagnose the position of the lesion was made at a time when accuracy could in no wise be assured; for all acquainted with the subject of localisation of brain mischief are aware that, on the one hand, paralysis is infinitely more reliable than spasm, and, on the other, that indirect symptoms often complicate the question for a considerable time, and until they pass off it is impossible to attain a high degree of likeliness in our local diagnosis. And, again, it will, I think, be conceded that the conditions of the post-epileptic state, no matter how well marked, are not sufficiently reliable upon which to found a diagnosis. The abscess in this case must, I think, be regarded as embolic, and I am inclined to the view that the infarct occurred some time before the rigor of Jan. 18th. It is interesting to note that the fits ceased after the operation, and that all paralysis passed off and speech returned. It is obvious from this that tension played an important part in producing the convulsions. In future, when the existence of an abscess is suspected, I should be disposed to explore more extensively, for though it was quite possible for pus to find its way out through the opening made, the chances of it so doing are nevertheless too slender to be trusted to, and the risk, from a surgical point of view, would not appear to be much increased by extending the aperture.

Newcastle-on-Tyne.

MARINE BIOLOGY. — The third annual general meeting of the Marine Biological Association was held on the 24th ult. at Burlington House, the chair being taken by Professor Flower. The report for the past year stated that the attention of the Council had been chiefly devoted to the superintendence and fitting of the laboratory at Plymouth, and to making arrangements for the future work of the Association in connexion with that laboratory, which it is expected will be ready for partial occupation in the present summer. It has been decided to issue to the members of the Association, in the form of a journal, the annual reports of the Council and other information.

ON THE FUNCTIONS OF THE FOURTH PAIR OF NERVES.

BY HENRY LEE,
CONSULTING SURGEON TO ST. GEORGE'S HOSPITAL.

THE fourth pair of nerves are distributed exclusively to the superior oblique muscles. They communicate with the third pair of nerves, and with the sympathetic in the cavernous sinuses. At their origin they decussate.[1] These relations indicate that they may act in sympathy with each other, conjointly, or in combination with the third pair of nerves. In the great majority of animals the muscles which they supply run transversely across the eyes and are opposed by muscles running in the same direction supplied by the third pair of nerves. Animals which have their eyes placed forward in the head offer an apparent exception to the general rule, and in these the muscles mentioned pass backward and outward, and have therefore been called "oblique." As the fourth pair of nerves supply only the superior oblique muscles, the function of the nerves and the muscles which they supply must be the same. When the superior oblique acts in conjunction with the inferior oblique of the opposite side, the two eyes move in concert and the eyes are rolled upon their axes. If the two oblique muscles act together with some corresponding action of the inferior obliques, their function is to compress the eyes laterally. In man, if one superior oblique only acted, the eye would be turned downward and outward. If both acted unopposed, both eyes would be turned downward and outward. This would give a very ungainly expression, and could be of no possible use. The real office of the superior oblique muscle is illustrated in its disposition in the eyes of the vast majority of the lower animals. In them the two transverse muscles embrace the eye, and the only action that they can have in all animals, when acting with equal force, is to compress the eyeball. For, although in some animals, from their oblique direction they might be supposed to influence the directions of the eye, this could not be the case in others. In the swan, for instance, the so-called superior oblique muscle runs directly across the eye in its transverse diameter. From the observation of the action of this muscle in man, its use has been assigned by no ordinary authority to be that of "raising and dragging the eye in conjunction with the changes to which the other features are subjected in bodily pain, in agony of mind, and in all this class of passion."[2] But not to mention that there are whole classes of animals in whose features no such expressions are ever recognised, the disposition of this muscle in fish and birds entirely forbids the idea of any such office being assigned to it. It may therefore be concluded that the oblique muscles, taken together, have a twofold action: first, that of rolling the eye; and, secondly, that of compressing it so as to alter its focal length. This affords a means of adjusting the eye to the vision of near objects, and may be regarded as the most powerful mode of adjusting the visual axis of the eye, while the mechanism for the finer adjustment is within the eye itself. The two oblique muscles taken together, then, have a double function, and a double and separate supply of nervous power.

Dr. Hosack, in a paper published in the Philosophical Transactions in 1794 (part 11, p. 222), observed that external pressure was capable of altering the focal length of the eye, so as to adapt it to vision at different distances. "With a speculum," he says, "I made pressure upon my eye while directing attention to an object twenty yards distant, and saw it distinctly; but, endeavouring to look beyond it, everything appeared confused. I then increased the pressure considerably, in consequence of which I was unable to see objects distinctly at a much nearer than the natural focal distance. For example, I held a book before my eye at the distance of two inches. In the natural state of the eye I could neither distinguish lines nor letters, but on making pressure with the speculum I was enabled to distinguish both with ease." Dr. Porterfield[3] objects to this explanation—that in the jack the oblique muscles "are both situated on the under side of the eye, where they decussate each other in the form of a cross"; and he there-

[1] College Prize Essay, by A. Woods. [2] Charles Bell.
[3] Porterfield on the Eye, vol. i., p. 424, *et seq.*

fore argues that the disposition of these muscles is not such as to allow them to compress the globe of the eye: "Had they been so disposed as to embrace the globe in the form of a ring, their contraction might then have squeezed the eye into an oblong form." Having repeatedly dissected the eye of the jack, the author is enabled to assert positively that the oblique muscles have the very disposition which Dr. Porterfield is here contemplating. His assertion respecting their decussation below the eye has evidently arisen from his mistaking the inferior rectus for one of the oblique muscles.

A case, indeed, has been quoted in text-books in which all the muscles supplied by the third pair of nerves were paralysed, and a good accommodation remained.[4] An inference is drawn from this case that the recti and obliqui muscles have really very little power in producing this accommodation. But in this case the fourth nerve was not paralysed; and inasmuch as the peculiar function of the fourth nerve is to regulate the degree of compression exercised on the eyeball by the superior oblique muscle, the case affords additional evidence of the real function of this nerve. In seals the fourth pair of nerves is well developed. The visual focal length would be different in them in the air and in the water for correct vision, and yet a seal can catch a fish as accurately out of the water as in it. The development of the fourth pair of nerves here corresponds with its power of adaptation of the eye to accurate vision under different circumstances. In the monkey, again, where accuracy of vision, in jumping from branch to branch, is so necessary, the fourth pair of nerves is well developed. In the cat, which measures its distance accurately before making its spring, the fourth pair of nerves is also well developed. But here, as in other animals which have a *tapetum lucidum*, the nerves and the muscles which they supply have another function. They not only regulate the antero-posterior diameter of the eye for the reception of light entering the eye, but also focus the light reflected from the *tapetum lucidum*.[5] The power of concentrating reflected light accurately upon an object must give the animal the same knowledge of distance as the focus obtained in ordinary vision. In the flaccid eye of a dead cat the rays of light reflected from the tapetum are nearly parallel. If the antero-posterior diameter of the eye were altered in a living cat, as by the action of the oblique muscle, the rays of reflected light after they had left the eye would converge as they do in the larger eyes of the sheep and the ox; the degree of the action of the oblique muscles in bringing the reflected rays to a focus would then afford an indication of the distance of the object looked at. The amount of convergence of the two optic axes in binocular vision plays, no doubt, a much more important part in the measurement of distance. But by far the larger majority of animals which have a tapetum use one eye only at a time. Where the two eyes are used together the degree of convergence is under the control of the external rectus, which, like the superior oblique, is supplied by a separate nerve.[6]

Those who have called a policeman's lantern a "bull's-eye" have never realised the analogy that exists between the lantern and the real eye. The glare from the anterior surface of the cornea may have originated the name. In the living eye the rays of light reflected from the tapetum may, within certain limits, be concentrated upon any given spot, and the light thus concentrated, as may be illustrated by a slightly concave mirror, is very much more intense than that produced by ordinary scattered rays. If a policeman's lantern were constructed with a slide so that the distance between the light and the reflector could be regulated, the analogy would be more perfect. The rays of light might then be brought to a focus instead of always being directed in paralleled lines.

In ordinary carriage lamps the light is thrown straight forward, which, no doubt, is an advantage to the driver; but for the horse itself the light is required where their natural reflectors throw it—namely, in front of their feet. In the transmission and reflection of light through the transparent parts of the eye some light is necessarily lost. If the whole of the light were reflected from a concave mirror three inches square, and concentrated in a focus of one inch, that inch would receive its natural proportion of ordinary light and nine times the amount of light falling upon each square inch of the mirror.

Savile-row.

[4] Power on the Eye, p. 592. [5] Med.-Chir. Transactions, vol. lxix.

[6] The advantage of judging of distances in binocular vision has probably some compensation in animals, which use only one eye at a time. The more perfect grasp of the eye by the transverse muscles must enable them to focus the rays of light more perfectly than in animals in which the muscles are oblique. The owl, unlike other birds, has its eyes placed forward. This disposition enables it to direct both eyes to the same object at the same time. It has therefore the advantage of binocular vision. In common with other animals which seek their prey at night, it has within a limited distance the power of judging of the position of objects by the angle at which the visual axes meet.

ON DR. BERGEON'S NEW METHOD OF TREATING CONSUMPTION.

BY ARTHUR HILL HASSALL, M.D. LOND.,
FOUNDER OF, AND CONSULTING PHYSICIAN TO, THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.

WITH a view to greater precision and uniformity in carrying out the treatment of consumption by Bergeon's method, I have had some analyses made, the results of which I will now detail. The analyses were undertaken at my request by Mr. Edwy G. Clayton, F.I.C., F.C.S., assisted by Mr. F. T. Knott, and they had for their object the determination of the quantity of sulphuretted hydrogen contained in the mineral water or other sulphurous compounds used in the process, both before and after injection.

The analyses of the Eaux Bonnes water used by Dr. Bergeon furnished the following results:—

1. *On the gallon.*

a. One gallon of the water contained
0·60816 grain of H_2S
= 25·94 cubic centimetres
= 1·58 cubic inch.

b. After passing carbonic acid gas, one gallon contained
0·095 grain of H_2S
= 4·04327 cubic centimetres
= 0·25 cubic inch.

2. *On the bottle.*

a. One bottle (700 cubic centimetres) contained
0·00608 gramme of H_2S
= 0·093814 grain of H_2S
= 3·997 cubic centimetres
= 0·2436 cubic inch.

b. After passing carbonic acid gas, one bottle contained
0·000952 gramme of H_2S
= 0·014689 grain of H_2S
= 0·623 cubic centimetre
= 0·003836 cubic inch.

3. *On the half-bottle.*

a. Half a bottle contained
0·00304 gramme of H_2S
= 0·046907 grain of H_2S
= 1·9985 cubic centimetre
= 0·1218 cubic inch.

b. After passing carbonic acid gas, half a bottle contained
0·000476 gramme of H_2S
= 0·0073445 grain of H_2S
= 0·3115 cubic centimetre
= 0·001918 cubic inch.

These results show that the amount of sulphuretted hydrogen contained in the bottled water corresponded closely with that present in the water taken at the source, according to the best analyses. This amount is, however, extremely small, it being only 0·1218 of a cubic inch in the half-bottle of the water, the quantity usually employed by Dr. Bergeon for a single injection.

After 3 litres of carbonic acid gas had been slowly passed through it, the time occupied being twenty-three minutes, the amount of sulphuretted hydrogen in the half bottle was found to have been reduced to 0·001918 of a cubic inch. This result is so far satisfactory, since it shows that the greater part of the sulphuretted hydrogen was carried over by the carbonic acid. No combined sulphuretted hydrogen is contained in the Eaux Bonnes water, and this being so there is no necessity for the employment of an acid, mineral or organic, for the liberation of the gas.

The first published results of Bergeon's method of treatment were all founded upon the employment of the Eaux

Bonnes water. More recently, however, recourse has been had to other sources of the sulphuretted hydrogen. Thus, as we learn from Dr. Burney Yeo's recent lecture, Dr. Bardet has employed a definite solution of sulphide of sodium. This is made by dissolving 10 grammes of the salt in 100 cubic centimetres of distilled water. One cubic centimetre of this solution contains 10 cubic centimetres of sulphuretted hydrogen, which is set free by the action of tartaric acid. Of this solution 10 cubic centimetres in 200 grammes of water, =3086 grains, are employed for each injection, so that if the whole of the gas were liberated, the quantity injected would amount to 100 cubic centimetres, equal to no less than 6·10 cubic inches. Here is an enormous difference in the amount of sulphuretted hydrogen introduced into the system: in one case less than a quarter of an inch, and in the other over 6 cubic inches.

Dr. Coghill has lately employed a saturated aqueous solution of sulphuretted hydrogen, using 1½ oz. to 2 oz. of this in 12 oz. of water; and this quantity, he states, has been well borne by every patient on whom it has been tried. Now 1½ oz. of such a solution should contain—if the water were really saturated at 15° Centigrade and 760 millimetres barometric pressure (these happening to be the temperature and pressure at the time the analyses were made)—3·117 cubic inches of the gas, and 2 oz. 4·156 inches.

Another substance which has been employed is bisulphide of carbon, but I have not seen any statement as to the quantity of this reagent that has been used. Its volatility, however, even at ordinary temperatures, is such that a comparatively small quantity of the liquid reagent (which boils at 46·6° Centigrade) yields with facility a large volume of carbon bisulphide vapour.

It is thus seen that there is a great difference in the amount of sulphuretted hydrogen injected, and yet the results of the treatment have been reported as equally favourable in all cases; the varying amount of the gas used not appearing to make any difference. According to the reports, the frequency of the pulse has been reduced, the temperature lowered, the night sweats relieved, the expectoration diminished, the nutrition greatly improved, the weight rapidly increased, and a great and surprising amelioration in every respect has ensued.

Lucerne.

A CASE OF

PERFORATING ULCERS OF BOTH FEET ASSOCIATED WITH DIABETES AND ATAXIC SYMPTOMS.

BY T. DAVIES PRYCE, M.R.C.S.,
SENIOR RESIDENT SURGEON, NOTTINGHAM DISPENSARY.

A. D——, aged fifty-six, framework knitter and hawker, was admitted as a home patient on May 27th, 1886. He had enjoyed fair health up to eighteen months previous to his being treated at the dispensary, with the exception of an occasional winter cough. For eighteen months past he had passed large quantities of urine, and had suffered from great thirst. He was never of temperate habits, and was addicted to "drinking bouts." He was stated to have led a wild life. No history of gonorrhœa or syphilis could be elicited, but strong presumptive evidence of venereal taint was present in the form of two scars, one in each groin, and various suspicious-looking marks on both legs. Eight months previous to admission he complained of pain in his legs, and stated that his feet felt dead. At Christmas, 1885, he caught cold, and suffered from an aggravation of the foot symptoms, together with abdominal pain and vomiting. He was described at this time as walking on his heels. In February, 1886—i.e., three months and a half before his death — the ulcers of the feet first appeared. When first seen by me the patient was suffering from bronchitis and symptoms of commencing diabetic coma. The heart sounds were feeble and occasionally intermittent. The arteries of the upper limbs were evidently diseased. The pupils reacted feebly to light. There was diminished cutaneous sensibility of both feet and also of the lower thirds of both legs. The knee-jerk was totally abolished. The skin over the legs and feet was of a livid hue, and below the normal temperature. A fetid odour emanated from both feet. The ulcers commenced as corns. One ulcer of the size of a two-shilling piece was situated over the plantar aspect of the metatarso-phalangeal joint of the right great toe. Its outline was sinuous and ragged. The bones entering into the formation of the joint could be felt at the bottom of the sinus, the metatarsal bone being eroded. A sinus of the same character but of smaller size was situated over the plantar aspect of the head of the fifth metatarsal bone of the opposite foot. Carious bone could be detected. There was also the remains of a partially healed ulcer on the inner aspect of the left great toe. The patient's urine was acid, sp. gr. 1030, contained sugar and a trace of albumen, but no peptone. He died on June 1st (fourth day of treatment) of diabetic coma.

There was no history of gout, rheumatism, or injury in this case. The patient had, however, been exposed to all weathers, and in following his occupation of hawker had walked a great deal. The spinal cord and the nerves of the right lower limb were examined. The only naked-eye changes which could be detected were: (1) the posterior tibial nerve presented considerable enlargement in the lower third of the leg, and was here partially surrounded by inflammatory material, in which was also embedded the atheromatous posterior tibial artery; and (2) the plantar termination of the nerves were discoloured, and diminished in size.

The cord and peripheral nerves have been examined by Mr. Bowlby, of St. Bartholomew's Hospital, who has demonstrated the following changes. In the lumbar region of the cord there is marked atrophy of the cells of the grey matter, which are granular and have lost their processes. In the dorsal region the change is more advanced, most of the cells having completely disappeared. There was no cell exudation in either the white or the grey matter. In the peripheral nerves the changes are most marked in the posterior tibial trunk, where the white substance of Schwann is replaced by granular material which does not stain black with osmic acid. Some of the axis cylinders are normal, but many have atrophied and undergone a fatty change. The anterior tibial nerve shows a similar degeneration, but in a lesser degree, and in the sciatic the bulk of the fibres are normal. There appears to be a slight increase of the connective-tissue basis.

I wish also to mention that Dr. Byrom Bramwell, of Edinburgh, also describes similar changes in the peripheral nerves in this case, with the addition of well-marked vascular disease. He also found vascular changes in the spinal cord, but no ataxic lesion. It will be seen that the changes in the peripheral nerves differ from those recorded by Messrs. Savory and Butlin[1] in the greater amount of true nerve degeneration, and in the much smaller increase of the connective-tissue basis.

The comparatively frequent occurrence of perforating ulcer in locomotor ataxy[2] is well known, but it remains to be shown whether the ataxia in all these cases is due to a typical tabetic lesion of the cord, or, as is probable in the above case, to a peripheral neuritis or nerve degeneration. It is abundantly evident that in the case just recorded the actual cause of the perforating ulcers was a *peripheral nerve degeneration*. It will be seen that a good many of the causes which have been believed to produce perforating ulcer and peripheral neuritis were also present—i.e., cold, alcohol, diabetes, vascular disease, and continued pressure. It is probable that all these played a part in the causation of the disease, but I would venture to assign a considerable share to diabetes and vascular disease. Vascular changes have been found in a number of cases of perforating ulcer, and have been especially insisted upon by M. Pean and other observers. It also appears to me that diabetes may of itself be a cause of perforating ulcer, and this belief is induced by the following considerations: 1. That it is not uncommonly associated with locomotor ataxy, in connexion with which disease perforating ulcer occurs comparatively frequently. 2. That there exists a marked similarity between perforating ulcer on the one hand, and the destructive process of gangrene on the other, which latter is peculiarly liable to occur in diabetes. 3. It has been shown that diabetes does occasionally produce peripheral neuritis. 4. That another case of perforating ulcer has been recorded as occurring with

[1] Transactions of the Royal Medical and Chirurgical Society of London, vol. lxii., p. 373, 1879.

[2] See cases related by Professors Ball and Thibierge (Transactions of the International Medical Congress of London, vol. ii., p. 529); Treves (THE LANCET, Nov. 29th, 1884).

diabetes.[3] 5. That the glossy skin of Sir James Paget, which has been shown to depend on injury or disease of the pheripheral nerves, is sometimes seen in diabetes, and that there can be no doubt that this condition is of a somewhat similar pathological character to perforating ulcer. These considerations seem to show that it is possible—nay, more, even probable—that diabetes may sometimes play an active part in the causation of perforating ulcer.

Lastly, with regard to the operative treatment of this affection. It appears to me that the case which I have just related strongly supports Messrs. Savory and Butlin's opinion that the extreme measure (i.e., amputation of a portion or of the whole of the foot) is at best but a doubtful one; for it is evident from the diseased condition of the posterior and anterior tibial nerves that such a procedure would have led to no permanently good result in this case. If, however, amputation is decided upon, I believe it would be advisable not to adhere to hard-and-fast rules with regard to the site of the operation as laid down by various surgeons,[4] but rather to amputate through perfectly healthy tissues—namely, tissues external to or beyond the zone of anæsthesia so commonly present in perforating ulcer of the foot.

Nottingham.

A NOTE ON THE

TREATMENT OF PURULENT OPHTHALMIA.

By CHARLES HIGGENS, F.R.C.S.E.

SEVERE purulent ophthalmia is perhaps the most rapidly destructive disease to which the eye is subject; consequently its treatment has received a large amount of attention. It has always appeared to me that the disease could be rapidly cured if the discharge could be got rid of, or its character altered; it always seemed that it was the discharge which kept the disease going. Constantly washing away the discharge with some astringent and antiseptic lotion gave fairly good results; but the treatment was troublesome, and unless one saw to it oneself was rarely properly carried out. Some years ago Mr. Bader first suggested that persalts of mercury killed or destroyed the pus secreted by a mucous surface; he used to employ an ointment of red oxide of mercury, atropine, and vaseline applied to the conjunctiva, and with good results. The one objection to this treatment was the severe pain it caused, which seemed to me to quite counterbalance any advantage it might have over the washing away treatment. Since cocaine has been introduced, application can be made to the eye of substances which before its introduction caused so much pain that few patients could be found who would continue to use them. I have now treated some ten or twelve cases of severe purulent ophthalmia—some of distinctly gonorrhœal origin—by the following method, and the case reported from notes by my dresser (Mr. Andrews) is a fair specimen. 1. Wash away all discharge, and thoroughly cleanse the eyes with a 5 per cent. solution of boracic acid. 2. Apply thoroughly to the whole conjunctival surface, and fill the conjunctival sac with, an ointment composed of yellow oxide of mercury (16 gr.), boracic acid (20 gr.), hydrochlorate of cocaine (from 5 gr. to 10 gr.), and vaseline (1 oz.); and in some cases I also add 2 gr. of sulphate of atropine. The ointment may be applied with a camel-hair brush, a quill, a syringe with a good wide canal, or in any way that seems most suitable, so long as care is taken that no part of the conjunctival surface escapes it. 3. Cover the eyes with lint plentifully smeared with the ointment, and bandage them. Some pain is caused by the first application, which can be prevented by using a 2 per cent. solution of cocaine before making it; after the first application the effect of the cocaine in the ointment keeps the eye numb from one application to the next, unless the applications are made at very long intervals. The eyes should be examined in about two hours. If there is any discharge the whole process must be repeated; if there is none, the bandage may be reapplied and left for another two hours. As a rule, the ointment requires to be applied every four hours for the first two days, less frequently afterwards; *but the discharge must never be allowed to collect.*

Harry W——, aged eighteen, was admitted into the hospital on March 22nd, 1887. His history was that seven days before, March 15th, the left eye suddenly began to itch, and in the course of two days the eyelids became swollen and discharge commenced. Four days later the right eye became similarly affected; the discharge from both was very free. On admission pus was flowing freely from both eyes, there was much swelling of the eyelids, and intense congestion and swelling of the conjunctiva. There was some difficulty in examining the cornea; but the left was found to be perforated, and there was an ulcer on the right. The eyes were thoroughly cleansed, and the ointment, the prescription for which is given above, was applied (the application to be repeated every four hours), and the eyes were bandaged; quinine was ordered internally and the patient put to bed. The discharge was much diminished after the first application of the ointment. On March 27th, five days after commencing the treatment, there was very great improvement; the swelling of the eyelids had greatly subsided, the conjunctiva had flattened down and was much less congested, and the discharge, which had become less and less, had almost ceased. On April 1st there had been no discharge from the right eye, and very little from the left. The bandage was removed from the right eye. On April 9th, all swelling and discharge had entirely gone. There was slight corneal opacity below the pupil of the right eye. In the left eye there was an opaque flattened cicatrix—to which the iris was adherent—occupying the centre of the cornea; the eye had good perception of light.

Remarks.—The result of treatment in this case was most marked, the only cause for regret is that the patient did not apply sooner; had he done so, in all probability the damage to the left eye would have been prevented. He was not suffering from gonorrhœa, but the case looked like one of gonorrhœal infection.

Brook-street, W.

ON A CASE OF SUNSTROKE.

By A. CHEVALLIER PRESTON, M.R.C.S.

JOHN V——aged fifteen years, was brought to my house on Jan. 7th, 1887, by his mother. He had been cutting grass with a horse reaper, sitting on the machine driving, for the past two days, with no head shade but a cap, in the burning sun. He was gradually seized with pain in the chest and back, accompanied by convulsive movements of the arms and legs and contortions of the face. Has had no previous illness.

On examining him, I found him intelligent and able to tell me what I wanted to know, but his speech was muffled. His face was congested, and there was general redness of the skin of the whole body, with beads of perspiration on the forehead. His arms and legs were in a constant state of rhythmical convulsions. He could not protrude his tongue when asked to do so. Asked for drink. Pupils equal and slightly dilated. No unconsciousness. Pulse 100; temperature in axilla 99·4°; bowels constipated; passed urine freely. Unable to walk without assistance. Thinking the above symptoms were owing to the exposure to the sun in the intensely hot weather then prevalent, I ordered him to be kept in a darkened room, his head to be shaved, and an ice-bag applied to the head and back of neck, with a diet of milk and slops. I also prescribed a mixture containing ten grains of bromide of potassium and five grains of hydrate of chloral, to be taken every three hours, with five grains of calomel at bedtime.

Jan. 8th.—11 A.M.: On visiting him I found him still convulsed, with slight intermissions. No sleep had been obtained. The bowels had not acted. Unable to open jaw. No pain, but feels ill. Pulse 120, hard. Temperature in axilla 101°. Taking nourishment. Ordered ice-bag to be continued to the head, milk and ice by the mouth, and gave five grains of calomel again in powder; injected five grains of quinine hypodermically; the bromide and chloral to be continued.

9th.—3 P.M.: Has had half an hour's sleep, and says he is in no pain. Has taken two pints of iced milk in the twenty-four hours. Had a loose motion last evening, and passed abundance of high-coloured urine. Pulse 110, still hard;

[3] Laffon (Bordeaux). THE LANCET (Annotation), Sept. 13th, 1886.
[4] Bryant's Surgery, 4th edition. Erichsen's Surgery, published 1884. Jacobson in Heath's Dictionary of Surgery.

temperature 100°; respiration 26, shallow. When asked to protrude his tongue, he did so, but it got fixed between the teeth, which were gradually closing upon it involuntarily, and I had difficulty in getting it back, as he bit it severely, causing it to bleed much. No power over jaws, but can move his tongue and swallow fluids with difficulty. No paralysis of sphincters or of general muscular system, but it seems to be confined to the head and face. Spasms tetanic. As he had had no sleep, I gave one-third of a grain of morphia hypodermically. To continue medicine.

10th.—11 A.M.: Slept two hours yesterday after morphia. Bowels not open. Pulse 104°; temperature 100; respiration 26, shallow. Conjunctivæ much injected; pupils normal. Fluids return through the nose when drinking. Quite sensible. Can open the jaws a little. Marked opisthotonos and strong convulsions of whole body every few minutes. Ordered chicken jelly to be added to his diet, and increased the dose of chloral to ten minims and gave it less frequently—every four hours.—8 P.M.: Slept at intervals through the day; drowsy. Taking food well. Paroxysms not so frequent, but quite as severe. Pulse increasing in rapidity, 142; respiration 30; temperature 101·1°. Micturates freely. Skin dry. Breathing quick, but free from crepitations or rhonchus. Can open his teeth to the extent of one inch. Quite conscious; says he is in no pain.

11th.—11 A.M.: Has passed a quieter night, but restless since daylight. No opisthotonos during my visit, but persistent trismus. Bowels not open. Pulse 120; temperature 101°; respiration 30. Taking nourishment through a tube. Complained of great pain over cervical vertebræ.—8 P.M.: Has slept at intervals during the day. No twitching during sleep. Taking food fairly well. Skin hot, congested, and dry. Pulse 132; respiration 30. Abdominal diaphragm and intercostals not working in rhythm. Bowels slightly moved. Says he feels better. A severe attack of opisthotonos occurred during my visit, otherwise the paroxysms have been less frequent, though three occurred to-day. Can open the jaws decidedly better, but cannot protrude the tongue. Cannot move his legs, but there is no loss of sensation.

12th.—11 A.M.: Has passed a restless night owing to thirst and the extreme heat of the weather. Fits less strong. Takes nourishment well through tube. Temperature 100·1°; pulse 110°; respiration 25. In no pain to-day. Can put out his tongue better, and can open the jaws wider. Tongue clean. No opisthotonos. Gave a soap enema, which brought away a normal motion.—8 P.M.: Has been restless through the very hot day (100° in shade), but slept an hour in the afternoon. Convulsions much quieter. No opisthotonos. Can open the jaw and protrude the tongue much better. Pulse 108; temperature 100·1°; respiration very jerky and irregular, 26. Asleep when I left. To continue the chloral and bromide every four hours; ordered the yelks of two eggs to be given in milk, and plenty of chicken jelly through the night.

13th.—Noon: Has had a better night and taken all the nourishment ordered. Slept four hours. Still complains of pain in his neck and back. Is having slight convulsive spasms of the whole body every few minutes, but is quite conscious during them. Pulse 110; temperature 101°; respiration 38.—9 P.M.: Very restless during the heavy thunderstorm which occurred this afternoon, and was with great difficulty kept in bed. Convulsions have now returned stronger than ever. Respiration 30 ("Cheyne-Stokes"); pulse 132; temperature 101·2°. Gave four minims of ergotine hypodermically, and added ten minims of the liquid extract of ergot and the chloral mixture every four hours.

14th.—Noon: Slept one hour and a half during the night, and took a fair quantity of milk and broth. Convulsions less severe, but more frequent. Temperature 103°; pulse 160; respiration "Cheyne-Stokes" in character. Mucous râles all over chest. No loss of consciousness, but evidently sinking. Ordered one drachm of rum in milk every two hours.—6 P.M.: Has been gradually getting weaker, but no loss of consciousness. Pulse increasing in rapidity, almost immeasurable. Says he is in no pain. Convulsive twitches all over the body incessantly. Jaw relaxing. Died, quite conscious to the last, at 10 P.M. No necropsy would be permitted.

Remarks.—I much regret that I could not obtain permission for a post-mortem examination. This case appeared to me to be primarily one of spinal meningitis following prolonged exposure to the sun, the lesion being situated in the upper part of the cervical portion of the spinal membranes. There was probably a secondary affection of the cord itself, profoundly involving the motor nuclei, and later on the medullary portion, exciting them to the state of irritability manifested during the progress of the case. The vagus remained unaffected so far as its cardiac fibres were concerned, I think, as evidenced by the little disturbance of the heart's action; but there was, I consider, an involvement of the respiratory centre accounting for the want of coördination of the intercostal muscles with the diaphragm. The persistence of the intellectual faculties and the absence of pain, during the greater part of the disease, points to the non-tendency I have observed in similar cases to the upward spread of the lesion, to the brain itself, as one would expect. The body temperature did not attain the height of many recorded cases of less severity, and the non-loss of control over the sphincters, is, I think, an unusual feature in so serious a lesion.

Lincoln, Christchurch, New Zealand.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A SIMPLE METHOD OF PROCURING DEGLUTITION WHERE SUCH IS IMPEDED BY REASON OF EXTENSIVE ULCERATION OF THE EPIGLOTTIS.

BY R. NORRIS WOLFENDEN, M.D. CANTAB.,
SENIOR PHYSICIAN TO THE THROAT HOSPITAL, GOLDEN SQUARE.

ONE of the most distressing symptoms accompanying laryngeal phthisis with ulceration of the epiglottis is the difficulty patients experience in swallowing. Especially is this the case in advanced conditions where the epiglottis is more or less completely destroyed. In such circumstances the swallowing of even a teaspoonful of water, or liquid of any kind, is all but impossible, from the violent cough that is excited in consequence of the passage of some of the fluid into the larynx and trachea. Such patients are generally tormented with a thirst which they cannot satisfy, and the painful efforts they make to get down a few drops of liquid, and the terrible spasms of coughing and pain thereby produced, are truly pitiable to observe. One of my patients in the last stage of laryngeal phthisis, and in whom the epiglottis had more than half disappeared from ulceration, lately taught me a "wrinkle" which others may find of service. He informed me that he had discovered a method of drinking even large quantities of fluid with ease, and (in as nearly as possible his own words) said, "I thought of how we used to drink when we were boys, out of a running brook, by lying down upon the bank and putting our mouths to the water, and I resolved to try the plan. I sent for a piece of indiarubber tubing, and found that by adopting the same position I could drink off the whole of a tumblerful of water with ease and comfort." I asked him to give me a demonstration of the feat, and lying stomach downwards upon the couch in my consulting-room, with the head and arms hanging free over the end, and with the feet higher than the rest of the body, he took a large tumblerful of water in both hands, and placing the open end of a piece of indiarubber tubing (about six inches in length and with a vulcanite mouthpiece) in the fluid, and the mouthpiece between the lips, drained off the contents without stopping, and with the greatest ease and comfort. Not the slightest pain or cough accompanied the act, showing that none of the fluid entered the larynx. The feat was the more remarkable to me, who had often seen him making great efforts to swallow fluids, but unsuccessfully, in the sitting position. In the ordinary position a teaspoonful of fluid was as much as he could manage to get down, and this was accomplished only at the cost of much pain and terrible paroxysms of coughing. The plan is simple enough, and is one which will procure relief for other patients afflicted with the same terrible laryngeal conditions; as I have never seen it applied before, I venture to mention it to those who have to treat similar conditions, and I am sure they will find it an excellent method of alleviating one of the most distressing sufferings of patients of this class.

Upper Wimpole-street, W.

PUNCTURED WOUND ENTERING THE SPINAL CANAL.

BY ROBERT W. WALSH, M.R.C.S., L.S.A.,
RESIDENT ASSISTANT, EAST LONDON HOSPITAL FOR CHILDREN, SHADWELL, E.

THE following case, which lately came under my notice, may possibly be of interest.

H. B——, a boy aged twelve, was brought to the Children's Hospital, Shadwell, one evening, with the following history. Some hours before I saw him he had been playing with his sister, and the latter had accidentally wounded him in the back with a pair of scissors. The wound appeared so trifling that the patient was not brought immediately to the hospital, but continued to play about, and then had his tea as usual. Shortly after this meal he was seized with sickness, and vomited once or twice. His back was looked at by his father, and his shirt was found quite wet. He was then brought to the hospital, where I saw him. Before I could look at the wound the boy was seized with violent retching, and brought up some watery fluid. I had the boy undressed, and found his shirt and under-vest saturated with fluid of some sort. On examining the back, I saw a small punctured wound about a quarter of an inch long, and of such a character as would be expected from the nature of the instrument with which it was inflicted. Its situation was a little to the left of the spinal column, almost exactly in the mid-dorsal region. A probe introduced passed in the direction of the spinal canal, but was arrested by bony substance, which was apparently not bare; the instrument did not appear to enter the canal. The depth of the wound was just an inch. The boy's father would not leave him in the hospital, so I closed the wound with a small pledget of lint dipped in collodion, and sent the boy off, with instructions to come again if any bad symptoms appeared. He came next day, having been again sick and the wound having reopened. As admission was still refused by the father, I again examined the boy, and found matters almost exactly as before—the shirt and vest wet through, and the boy retching violently while in the room. In watching the wound, a small drop of clear watery fluid could be seen to collect at the lower angle of the puncture, and then roll slowly down the back. I united the edges of the wound with a fine silk suture, and sent the patient home as before. I saw him again in a week, when the wound was healed, and there had been no more sickness or other bad symptom. I have seen him once or twice since, and he remains perfectly well. It seems somewhat remarkable that in what was evidently a punctured wound entering the spinal canal, and remaining unclosed for over eighteen hours, there were no symptoms indicative of either spinal meningitis or irritation beyond the violent sickness; and it is also significant that this sickness continued as long as the wound remained unclosed, and ceased immediately closure was effected.

Shadwell.

CASE OF SUPPURATIVE HEPATITIS OCCURRING IN GENERAL PRACTICE.

BY CHAS. E. MONRO, L.R.C.P.ED., M.R.C.S.

C. C. S——, aged thirty-four years, formerly a sergeant in the Royal Artillery, went to India about the beginning of the year 1877, and was stationed at Ferozepore. Whilst there he contracted several attacks of malarial fever, and one of acute dysentery, lasting a fortnight; this was followed by chronic hepatitis, and an abscess was suspected. He was then a teetotaler, and had never suffered from any previous illness or syphilis. He recovered, was invalided home in May, 1880, and purchased his discharge, at the time feeling quite well. He then followed various occupations, but became very intemperate, and had one attack of delirium tremens. About eight months ago he first began to feel ill, with loss of appetite, wasting, progressive debility, and dyspeptic symptoms; he became sallow, and passed acholic stools, and latterly had diarrhœa with much mucus. There was a considerable degree of splenic tenderness, with slight splenic enlargement, also retching and vomiting. A tumour gradually formed in the right hypochondrium, extending to the epigastrium, with great pain. The patient could only lie in a position inclining to the right side, and with his knees drawn up. Rigors set in, and I diagnosed hepatic abscess. The temperature never exceeded at the time of my visit 101·5° F. At length the tumour obviously fluctuated.

On March 17th last, in consultation with Dr. Seymour Taylor, the abscess was aspirated, and fifty-one fluid ounces of pus removed. The patient rapidly recovered, and, from an almost moribund state, is now well and hearty, has gained much in weight, and has gone into the country for change of air; he is also able to walk four or five miles without feeling fatigued. The appearance of the abdomen is natural, the area of hepatic dulness a little extended. Urine: sp. gr. 1021; no albumen or casts; deposit of lithates. Thinking that it might possibly be a suppurating hydatid cyst, Dr. Seymour Taylor and I carefully examined the pus microscopically. There were no hooklets, but pus cells, broken-down hepatic tissue, crystals of cholesterine, and columnar epithelium. I saw the patient on June 23rd; he was then in good health.

Penge.

COMPLETE RETROVERSION OF THE UTERUS IN A VIRGIN.

BY WM. J. FRASER, B.A., M.B. DUB., &c.

THE following note may be worthy of record, and first I will give the girl's story or history, and then what I found on seeing her.

Mary Jane W——, aged twenty-three, of a loose build, was a general servant living at Taunton, and was in her usual good health, when on Thursday night, July 29th last, on going to bed she felt a sudden pain in the genital organs, with a total inability to pass urine. She continued in great pain all night, and vomited some watery stuff. About 5 A.M. her master asked a doctor to see her. She continued about the same, passing no urine, bowels costive, and in pain. On Sunday, Aug. 1st, a catheter was passed but drew off no urine. A swelling was then noticed in the abdomen, which increased, the pain being intense at times. Warm stupes relieved her. She afterwards passed a drop or so of urine, but she says she was "always wet." She was advised to go to the Taunton Infirmary, but her mother preferred bringing her home, which she did on Aug. 5th. When I saw her on her arrival, about 11 P.M., it being late and she exhausted by vomiting and the journey, I gave her a good dose of chloral, promising to see her again in the morning. At my visit on Aug. 6th, on examining the abdomen externally, a tumour was felt similar to about a five months' pregnancy, but more inclined to the right side, where it felt hard, though it was soft and movable on the left side, and if pressed on, she said, in answer to my question, that it made her feel as if she wanted to micturate. Per vaginam the examination revealed a chaotic mass; none of the familiar landmarks were felt. The posterior part was occupied by a round hardish mass tapering towards the pubic arch, under which was felt a round, cord-like substance, and on passing the finger further up an opening like the patulous os was felt. I now saw that I had to deal with a case of complete retroversion, causing retention and distension of the bladder and difficulty of defecation. I at once tried to pass a No. 9 gum-elastic catheter in the usual way, but totally failed; so placing her on her back, and with ocular aid finding the now retracted meatus, I came to the obstruction about an inch and a half above, which by gentle pressure I passed, thus being enabled to get into the bladder and to draw off four pints and a half of urine, the tumour disappearing and giving the patient immediate relief. Now, knowing the cause, I sent for a few pessaries, drawing off the urine twice a day; on August 10th I tried without chloroform to return the uterus, but failed. My senior partner, Dr. Gervis, being away for a few days, I waited till the 14th, when (he giving chloroform), after a good deal of difficulty, I succeeded in getting the now enlarged uterus into place, and kept it there by a Blackbee's pessary. Rest in bed was ordered, and a soothing mixture given. On the 18th the bladder had not regained its tone. The catheter was passed as before. There was no pain now, the bowels were open, and the girl felt better, but weak. In the evening she complained of pain caused by the pessary, which I removed, first passing the catheter. On the 17th, at my morning visit, I was told she had passed a little urine, and the catheter was not used. From this date she improved. She was kept in bed for a

week or ten days, and the pessary was not again introduced. After this she was up and about, and seemed as though she had never undergone the above three weeks' experience.

Ashburton, Devon.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

LONDON HOSPITAL.

DISEASE OF THE ANKLE-JOINT; EXCISION OF THE ASTRAGALUS.—COMPOUND FRACTURE INTO THE ANKLE JOINT; OPERATION.—DISLOCATION OF THE ASTRAGALUS.

(Under the care of Mr. RIVINGTON.)

THE following cases are illustrative of the surgery of the ankle joint. In two it was necessary to remove the whole of the astragalus, and in another a large portion of that bone was taken away. It will be seen on perusal of the notes that excellent results followed the methods of treatment adopted. In the majority of instances it is possible to reduce the astragalus when displaced forwards by manipulation when the calf muscles are relaxed; failing this, after division of the tendo Achillis. But there are cases, of which Case 3 is an instance, where no amount of skilful manipulation can effect reduction, and it is necessary to excise the bone. It is recommended by some that this removal of the bone be postponed for some time after the receipt of the damage, as the operation is then safer.

CASE 1. *Disease of ankle joint; excision of astragalus; cure.*—Rosetta C——, six years of age, was admitted in March, 1885, with disease of the left ankle joint. The parts were inflamed and swollen; there was free discharge from open sinuses; the probe passed readily into the joint, and bare bone could be felt. The patient had been in hospital at Bristol, where the sinuses had been freely opened. The foot was at first placed on a splint. After some days' rest the patient's ankle was explored, and the disease of bone being apparently limited to the astragalus, that bone was readily removed. When the patient was discharged one or two sinuses remained open. In November, 1886, she came under care again on account of an abscess at the back of the heel. This was opened, and a considerable quantity of pus evacuated. At this time all sinuses had healed, and the abscess wound having closed, the patient was discharged cured on Nov. 26th. She was last seen in April, 1887, when she could run about, and little difference beyond a diminution in the depth of the foot from the malleoli to the edge of the sole could be detected. Flexion and extension could be performed at the ankle joint. This patient was shown to the visitors at the district branch of the Metropolitan Branch of the British Medical Association at the April meeting.

CASE 2. *Compound fracture of left tibia into the ankle joint; fracture of left fibula with dislocation of the foot outwards; fracture of right tibia and fibula; secondary excision of left ankle joint; cure.*—J. A——, aged fifty, labourer, was admitted on January 28th, 1882. He had been thrown from a scaffolding a distance of about eighteen feet, and some of the woodwork fell on his legs, producing the injuries above mentioned, for which he was admitted. The right tibia and fibula were fractured at the junction of the upper and middle thirds, the tibia being much comminuted. There was great swelling. The left internal malleolus was found broken transversely, the upper fragment being forced through the skin by the eversion of the foot. The joint surface of the malleolus could be plainly seen, a wound about two inches long, through which the upper fragment of the internal malleolus projected, communicating freely with the joint. The posterior tibial artery was uninjured. Mr. Rivington saw the case soon after admission, and decided to treat the case antiseptically. A carbolic spray played on the wound for some time, the joint was well syringed out with carbolic water, and the ankle then dressed antiseptically. The limb was kept at rest by means of a back splint and an outside splint with a footpiece. The right tibia and fibula were put up as usual—viz., on a back splint with outside and inside splints. Good position was obtained in both limbs. The patient was then given a hypodermic injection; the right tibia and fibula were swung, whilst the left limb was kept steady by means of sand-bags. A good deal of constitutional disturbance, swelling of the left leg, and suppuration followed, necessitating incisions. On Feb. 10th the limb was very boggy from the ankle to the middle of the thigh. A sinus was found to have opened midway between the ankle and the knee in front. An opening was made above the knee and a quantity of pus was evacuated. On Feb. 13th the whole of the skin in front of the leg was found to be undermined, and there was free suppuration. The incisions had to be enlarged on the 16th, and drainage tubes were inserted. By the 27th the limb was more healthy and the swelling had disappeared. A fragment of bone, comprising the whole of the internal malleolus, was removed. Erysipelas appeared on the nose and face, but there was no rigor, and the temperature was 101° only. On the 28th a free incision had to be made on the outer side of the leg. On March 4th three fragments of necrosed bone were removed from the ankle. By March 16th the wounds at the upper part of the leg were granulating; a collection of pus was opened in front of the ankle. The splints were removed from the right leg; good union had occurred. On April 3rd antiseptics were discontinued, and the wound dressed with oiled lint. On May 2nd there was no union in the fracture of the left tibia. The wound looked healthy, and there was very little discharge. It was very difficult to keep the fracture in position. On the 15th the wound required dressing every other day, and had a most unpleasant odour. The temperature varied from normal to 100°. On June 7th the wound was enlarged, the end of the fibula was removed, the lower end of the tibia chiselled, and a thick section of the astragalus taken away. The bones were very soft. The parts were dressed with oiled lint and cotton-wool, and the limb was kept in splints. The process of healing was slow, and great difficulty was experienced in keeping the foot in position. On July 4th the foot was in better position. Some amount of union had taken place on the 31st; the inner opening was very small, and the outer one closing. The patient's condition had much improved. On August 8th the sinuses had not quite closed, and the leg and foot were œdematous. On Sept. 10th a silicate of potash bandage splint was applied, which on the 18th was slit up in front, eyelet-holes made, and laced. Patient wheeled out into the garden. On Oct. 9th there was fair union, with movable joint. The foot was placed in a M'Intyre splint; subsequently the silicate of potash bandage was employed. The patient did not go out of the hospital until he had been in about twelve months. He was then going about on crutches. He was last seen on April 26th, 1887, when he was shown to the district branch of the British Medical Association. He had had a serviceable foot for a long time, with some movement at the ankle. There was no wound or sinus, and he was able to bear weight and walk on the foot.

CASE 3. *Subastragaloid dislocation of the right foot outwards, with displacement of the astragalus; removal of the astragalus.*—William D——, aged forty, bricklayer, was admitted on October 6th, 1880. He had fallen from a height of about twelve feet on to his feet. On examination it was found that the foot was elongated from the ankle forwards and turned outwards, whilst the astragalus itself was twisted, the head being prominent near the inner malleolus and the body pushed backwards and outwards, so that the posterior edge of the astragalus could be felt behind the tibia. The leg was much bruised. Attempts at reduction, including division of the tendo Achillis, failing, and the patient not consenting to the removal of the astragalus as advised by Mr. Rivington, the foot was left till Oct. 26th, when it had become still further displaced. With the patient's permission the astragalus was then excised under the spray. The foot had previously been dressed antiseptically as a precautionary measure in order to guard against possible sloughing of the soft parts over the bone. The neck of the astragalus was found to be embraced by the tendons of the tibiales muscles, and the tissues over the head of the astragalus were black and sloughing. The tendo Achillis was united by suture on removal of the bone. The wounds were dressed with gauze till Nov. 20th, when antiseptic dressings were left off, the discharge smelling offensively. On the 22nd a sinus at the upper part of the

leg was laid freely open, and a large quantity of pus evacuated. On the 28th the leg was œdematous and the foot much swollen. In the wound at the ankle there were numerous sloughs, one being the tendon of the tibialis posticus. A fortnight later an abscess was opened over the outer ankle. In another week the wounds were granulating healthily and rapidly filling in. The temperature had always stood below 100° since the operation. The patient made a good recovery, with a useful foot.

NEWCASTLE-ON-TYNE INFIRMARY.

TWO CASES OF ELEPHANTIASIS OF THE LEG, IN ONE OF WHICH THE FEMORAL ARTERY WAS LIGATURED; REMARKS.

(Under the care of Mr. PAGE.)

FOR the report of the following cases we are indebted to Mr. Maynard, house-surgeon:—

CASE 1.—W. S——, aged twenty-one, single, glassmaker, born in Sunderland and never been out of the place all his life, was admitted on March 24th, 1887. His history contained little of note, except that he was born with the left thigh and leg larger than the right, and that, as he grew older, the calf enlarged more than the thigh. The skin was natural until he was fifteen years old, when it began to get rough and thickened. He has had a few "attacks of inflammation" in the leg—the first nine years ago. While at work he noticed the calf (from knee to foot only) red and inflamed after he had felt ill for about an hour (no vomiting or shivering). He went to bed and stayed there six weeks. The skin was dry during the attack, and never cracked or discharged at all. It was kept dredged with flour. He was delirious, and had attacks of dizziness. All his symptoms were worse at night. After this attack he felt quite well, and the leg diminished somewhat in size. He remained free until three years ago, when he had another "attack." This kept him in bed two months, and in its course three warty excrescences, the size of small walnuts, appeared behind the inner ankle, ran into one another, and spread up nearly to the knee. They cracked and discharged thin, yellowish-white, sticky matter, without itchiness. They ran the same at night as in the day, not more. The discharge has continued until lately, increasing whenever he "caught cold." After this attack the leg remained larger and harder than before, though he went about his work as usual. During the last three years he has had five or six similar attacks (the last three months ago), lasting from one to four weeks each, and leaving the leg larger each time. When a baby he was circumcised, his mother says.

On admission the condition was as follows:—All organs healthy. Penis small and buried in scrotum, which forms the prepuce, as it were, and a tight one too, the glans being completely hidden. Testes normal; pubic hair short and scanty, and does not grow towards umbilicus, as is usual in men. Left leg: The thigh looks like a continuation of the trunk, so large is it; the skin covering it is everywhere normal, without œdema, and there are no enlarged glands to be felt. The femoral artery can be felt deeply situated in Scarpa's triangle, and much larger in calibre than the right. The thigh feels firm and elastic, but not hide-bound, fluctuating laterally but not vertically. When he moves the limb (apparently an easy matter) the different thigh muscles feel very large. The bone cannot be plainly made out. At the knee the landmarks reappear, and can be felt (patella, &c.). Below the knee the leg enlarges greatly, and the skin alters. In the upper third it is like the thigh, but below that it becomes indurated, roughened, and presents numerous slightly-raised, flattened, red nodules—like blind boils—each, he says, he can distinctly trace to a blow. The lower portion of the leg presents a truly remarkable sight. It is immensely large, nodulated and gnarled on the surface like an old oak, the nodules lying close, and being of the size of shillings and half-crowns. The whole feels hard and tense, but indistinctly elastic. The surface of the patches is red, shining, and smooth; not inflamed. The skin between is dry and scaly. The skin over the last three inches of the leg resembles ichthyosis; much fissured, dry, and warty. There is a deep sulcus at the ankle, and then the dorsum of the foot rises up with a swelling similar to that of the leg, except that the skin is smooth everywhere but above the second toe, where there is a small warty excrescence like a small dried sea-anemone. The toes are spread out and flattened. The measurements on admission were as follows:—Right leg: middle of thigh, 19 in.; at patella, 10 in.; middle of calf, 12¼ in.; lower, at broadest part, 8⅜ in. Left leg: middle of thigh, 26½ in.; at patella, 24½ in.; middle of calf, 31 in.; lower, at broadest part 32½ in. No filaria were found, and the blood and urine were normal.

The patient was treated in bed with a Martin's bandage, and at the end of two weeks the calf was reduced in circumference by seven inches, the thigh only one inch, and the foot not at all. The tibia and femur were much enlarged, being nearly three times their natural thickness. During the treatment he had two attacks of erythema on the skin over the dorsum of the foot, accompanied by a slight rise of temperature, and the bandage had then to be stopped for a few days. On May 20th he got up, with the bandage on. On May 23rd the leg was much larger, though still soft. On June 1st he went home, and was told to use the bandage. Amputation in the thigh was discussed, but was put aside for the present.

CASE 2.—Lawrence M'C——, aged forty-six, single, seaman, a native of the West Indies (Nevis), where he lived until he was sixteen years old, was admitted on July 20th, 1886; his history was briefly this: General health always good; hard drinker; no syphilis. When sixteen years of age he first noticed swelling about the right ankle, which gradually spread up the leg, increasing slowly in size, but never gave him any inconvenience or pain until seven years ago, when he began to feel it heavy and a dull aching numbness about it, and which compelled him to leave the sea and do light work. Never had any attacks of inflammation in the leg, only a few boils and pimples on it. Until four years ago the skin resembled that of the other leg, but it turned darker in colour, and scabs began to form, discharging blood and matter. This discharge ceased when lying idle, and was worse in winter. His father died of phthisis; his mother and one sister had a kind of elephantiasis, though it was permanent, never varied in size like his, and gave them no pain. He is of African descent.

On admission the thigh was normal. Below the knee the leg was uniformly enlarged and hard; the skin was dark, dry, and scaly. Here and there were small excoriations discharging pus. The ankle was included in the swelling, and there was some swelling of the dorsum, slight in amount. He had a hydrocele of left tunica vaginalis testis, which was tapped twice, and contained ordinary hydrocele fluid. Blood and urine normal.

Rest in bed not producing much change, on October 1st Mr. Page ligatured the femoral artery in Scarpa's triangle. The artery was small in calibre, so much so as to make a double femoral anomaly probable. After the operation the leg gradually decreased in size, but never became as small as the left, nor the skin as supple, though the excoriations healed. The tibia could be felt to be much enlarged—half as thick again as, or more than, the opposite bone. At the end of the month he left with the wound not quite healed.

He was re-admitted on April 20th, 1887, with the leg almost as large as on his first admission and the skin much excoriated. He had been on the tramp, and fared badly. Had bronchitis and was low. With good feeding and rest the leg improved, and then, as the man declined any further operation (amputation through the thigh having been suggested), he went out.

Remarks by Mr. MAYNARD.—These cases induce comment mainly as regards their etiology and treatment. Filaria could have taken no share in producing Case 1, though in Case 2 it would be difficult to prove that their influence had never been at work. Hutchinson's idea—viz., that of constantly recurring cutaneous erysipelas,—attractive as it seems, would hardly explain it in the face of the great enlargement of the bones in both cases, and in Case 2 the absence of any inflammatory history. The general congestion in the limb caused by local inflammation could not be expected to produce such osseous hypertrophy. As regards treatment, rest with elastic pressure produced good results while it was persevered with, but only so long. Ligature of the femoral in Case 2 was certainly temporarily very encouraging, but afterwards disappointing. Indeed, when one remembers the great enlargement of the bones, the conclusion one must come to—at any rate in cases where it is present—is that no amount of rest or elastic pressure can cure, and nothing short of amputation will permanently relieve. In Case 1 this would have been a very formidable business.

EDINBURGH ROYAL INFIRMARY.

SIMPLE FRACTURE OF THE FEMUR WITH RUPTURE OF THE POPLITEAL ARTERY AND VEIN; AMPUTATION THROUGH THE THIGH.

(Under the care of Professor ANNANDALE.)

FOR the notes of the following case we are indebted to Mr. D. G. Marshall, house-surgeon.

J. S. T——, aged fifty, admitted at 5 P.M. on Feb. 18th, 1887, suffering from an injury to the right thigh. A few hours before admission the patient was working in a mine when a mass of coal and stone weighing several tons fell upon him. At the time of the accident he was lying on his left side, and the mass struck him on the outer side of the right thigh and leg. He struggled violently to release his legs for about a quarter of an hour, but was unable to do so. At the end of this time assistance arrived and he was released; temporary splints having been employed by a medical man, he was conveyed to Edinburgh (a distance of fifteen miles) by train.

On admission, the patient was suffering slightly from shock, but was perfectly conscious. On removing the temporary splints, he was found to be suffering from a simple transverse fracture of the femur about two inches above the condyles. There was a little shortening of the limb, with a slight deformity at the knee; this was easily reduced, and seemed to depend on a displacement of the tibia forwards. There was some swelling of the limb, both at the seat of fracture and in the calf; below the knee the limb was cold to touch, and no pulsation could be felt in either of the tibial arteries. No splints were applied, the injured part being simply swathed in cotton-wool and laid on pillows. During the evening the condition of shock wore off, and some degree of warmth returned to the leg as far down as the ankle, the foot still being cold. Temperature in the axilla 99·8°.

Feb. 19th.—Morning: The cold portion is limited to the foot and leg about two inches above the ankle joint. Temperature 99·6°. Evening: The leg is cold over the lower two-thirds. Temperature 99·8°. Patient feels comfortable, excepting that his foot has a "dead" feeling.

20th.—Condition unchanged, excepting that the foot has a slightly mottled appearance.

21st.—Lower two-thirds of the leg and the foot perfectly cold; the mottling of the skin very marked. The patient having been put under chloroform, Mr. Annandale made an incision on the inner side of the limb over the seat of fracture, when some dark-coloured blood escaped. On passing his finger into the wound he found the joint was implicated, and at once proceeded to amputate at the junction of the lower and middle two-thirds of the thigh. On examining the parts removed, the femur was found to be fractured in a transverse direction about two inches above the condyles; there was a large rent in the posterior part of the capsular ligament of the knee joint, and both the crucial ligaments were torn through. The popliteal artery and vein were torn completely across; the separated torn extremities of the artery were of a pointed shape and twisted in appearance. The muscles of the calf were infiltrated with blood.

During the evening after the operation the temperature was 99°; pulse 84. On the 23rd the temperature rose to 102·2°. There was slight tension in the flaps, and some stitches were removed. After this he made good progress. The stump healed rapidly, and he was sent to the convalescent home on the 31st of March.

Remarks by Professor ANNANDALE.—This case seems worthy of record; firstly, on the question of diagnosis and treatment. Rupture of the vessels is in few surgical works referred to as specially likely to accompany this fracture. The sharp edge of the lower fragment drawn backwards and downwards is brought in close proximity to the vessels, and supposing the symptoms of injury to the vessels to be not well marked, the severity of the case might be overlooked. Billroth, in his Clinical Notes, records such a case, treated with plaster-of-Paris bandages, followed by gangrene. His patient died after amputation of the thigh. The second point of the case is the very good example of arrest of hæmorrhage by natural means. The quantity of blood effused into the tissues was very small, and the ends of the arteries looked as though they had been twisted with forceps.

Medical Societies.

OPHTHALMOLOGICAL SOCIETY.

Anatomy of the Capsule of Tenon.—Discussion on Toxic Amblyopia.

A SPECIAL meeting of this Society was held on the 23rd ult., Mr. H. Power, F.R.C.S., Vice-President, in the chair.

Mr. LOCKWOOD exhibited a series of specimens, brought from the museum of St. Bartholomew's Hospital, bearing on the Anatomy of the Capsule of Tenon. They showed the continuity of the capsule and the sheath of the optic nerve behind, and its relations to the conjunctiva in front. The suspensory ligament of the eye and its attachments to the wall of the orbit were clearly seen from a number of points of view. The intra-capsular ligaments of the various muscles and their relation to the recti were demonstrated, and also the inward bend of the superior rectus. Lastly, attention was drawn to the tunica adventitia oculi and to the cheek ligaments of the recti. He thought the latter might be of considerable importance in relation to squint operations.—Mr. POWER spoke of the importance of an accurate knowledge of the precise attachment of muscles and of the precise effects of division of tendons. Everyone must have experienced unexpected and unexplained instances of failure in the treatment of cases of squint.

Mr. NETTLESHIP opened the discussion on Toxic Amblyopia. In reference to the question of alcohol, he said that he had met with no instance of amblyopia in drinkers who did not smoke, but he thought that in smokers alcohol might contribute in determining the onset and degree of the affection, and he instanced the case of a man who smoked from a quarter of an ounce to half an ounce of mild tobacco a day, and who had lately taken to drinking, whose vision, which had been failing for a month, was—R.E. $\frac{2}{6}$, L.E. $\frac{2}{9}$; and also another case of a man aged forty-nine suffering from alcoholic paralysis who was a large smoker, but had no central defect for colour; his vision improved very materially when he partly left off drinking and smoking. Cases seeming to show that alcohol had no effect were common—that is, where the leaving off tobacco was sufficient to effect cure or improvement, the alcohol being indulged in in undiminished quantity. Considerable pallor of the whole disc was common in severe cases, and might persist, though the vision improved. There were forms of central amblyopia in non-smokers. There was a hereditary form in which families of young adult males got amblyopia rather rapidly, some being smokers and some not. Apart from these, he had only seen two cases of central amblyopia not attributable to tobacco. One was in an old man of seventy-two, who had not used tobacco for twenty years, and whose sight had been failing for eight years; his discs were rather pale and the arteries diminished; he remained *in statu quo*. The other patient was a man of twenty-four, whose sight failed whilst he was extremely ill with syphilitic rupia; there were no ophthalmoscopic changes, but a scotoma exactly as in tobacco cases. He had not used any tobacco for eight months, and his sight had only begun to fail three months after he left it off. He had met with this form of amblyopia in a man who only smoked three-quarters of an ounce of shag a week. As to the length of time a person must have been a smoker, he instanced the case of a man who took to smoking at the age of twenty-nine and a half years, consuming an ounce of shag daily; he was also a heavy drinker. At the end of six months he took the pledge and kept it for six months, and between two and three weeks later his sight began to fail. In another instance a man, aged fifty-two, had characteristic central amblyopia after being a smoker for three years. He (Mr. Nettleship) had met with tobacco amblyopia in father and son once, and once the son of a patient was found to have locomotor ataxy and progressive atrophy of his discs. In two patients (sailors) there was a history of an attack of night-blindness whilst at sea some years previously. He had only met with one instance of a second attack in a patient who had been cured by giving up tobacco, and then took to it again four years later; at the end of another year his vision again failed. In the speaker's experience cases might recover with complete or partial disuse of tobacco. Sometimes cases did not progress beyond a certain point, although smoking was not discontinued.—Mr. MCHARDY referred to a case of a gentleman, aged fifty-

two, who had commencing cataracts, which had been supposed to be the cause of his failure of vision. When tobacco was given up he made marked improvement in twelve weeks, and in four months had good colour vision. He believed that some severe nervous or mental shock would always be found in these cases, if persistently inquired into, and instanced several cases supporting this view; he did not believe that the intermission of tobacco in those habituated to it had anything to do with the causation. All tobacco must be stopped, and he was decidedly in favour of giving strychnine; it must be given so as to produce its full effects, and then decided improvement would be noticed in a few days; by the end of ten or twelve weeks all the recovery possible would have taken place, and most cases did recover completely. He had observed that a considerable proportion of the patients had suffered from malaria. He had never seen it under thirty-two years of age; most of the patients were between forty and fifty.—Mr. EDGAR BROWNE spoke of the difficulty they had in Liverpool in tracing their cases, most of the patients being sailors. He had met with one instance of a relapse, and he thought that perhaps their rarity was only apparent, inasmuch as the patient would know what to do if he had a relapse, and so would not come for advice. As a rule the patients did leave off smoking for a time, and if they returned to it, a milder tobacco was used. He had seen no case of amblyopia due to alcohol alone, and he had seen no case in women—a strong point against the alcoholic theory, as women drank just as freely as men, but did not smoke. Of his forty-nine patients, seventeen were heavy drinkers, four teetotalers. Persisting pallor of the disc was the rule, notwithstanding improvement in sight. He had seen one case in which the blindness was permanent, but there was a history of a blow, and he thought there might have been some true atrophy in that case. The affection was common about thirty, but most common between forty and fifty. He believed that some impairment always preceded the onset, and in sailors there was always the great change in habits as a factor. The lowest quantity he had ever known to cause it was a daily allowance of two ounces of twist. He had tried nitrite of amyl, but only once with benefit; in that case, when the face was flushed, there was a temporary improvement of vision.—Dr. HILL GRIFFITHS gave the results of his experience. Of twenty-seven patients who completely recovered, eleven had entirely given up tobacco; the others had reduced the quantity used. Of twenty-four patients in whom partial recovery had taken place, eleven had entirely discontinued the tobacco, and nine had lessened the quantity taken; in one woman a relapse took place during the treatment, because she took to smoking again. Of eleven failures, five patients had entirely given up tobacco, and two had made no reduction. Of the three patients who had got worse, two had smoked as usual all along; the other had given it up. Therefore there was a tendency to recover even without complete disuse of the drug, as one-third of the patients had only reduced the amount taken. He had not met with atrophy of the disc. He had seen five cases independent of tobacco: the first patient was a woman much pulled down by repeated pregnancies, who did not smoke, and whose impairment of vision was exactly like that seen in purely functional cases; the second was also a woman, a heavy drinker, who did not smoke, and who made a rapid recovery; the third was also a drinker, who did not smoke; the fourth had been a smoker, and was a drunkard; he had amblyopia, but no central scotoma; the last patient, like the first, had contracted fields and resembled a functional case. He had seen fourteen instances in women, and had met with two cases in men under twenty-three. From five to six years' smoking was the shortest period in which he had known the disease to be produced. He had seen hæmorrhages in several cases, all in heavy drinkers.—Mr. ADAMS FROST had not met with a case of central amblyopia without tobacco. He had seen one case of non-central amblyopia in a lady who did not use tobacco, but it might have been consecutive to an attack of typhoid fever. Nine of his patients were total abstainers, and some were heavy drinkers. All improved, and recovery usually took place in from six weeks to three months. The youngest patient he had seen was twenty-five. He had no faith in strychnine, but found iodide of potassium very useful.—Mr. LAWFORD, with Mr. EDMUNDS, referred to a fatal case of alcoholic paralysis in a man aged fifty-six. On examination, changes were found in the optic nerves; these were central higher up and lower down; they were sector-like and at the outer side. They did not believe the changes ought to be attributed to the alcohol, but rather to the tobacco. Unfortunately no examination of the patient's sight had been made during his life.—Mr. J. HUTCHINSON, jun., mentioned one case of amblyopia apparently due to alcoholism in a heavy drinker aged forty-two, who made a rapid improvement. He had once seen the affection appear in one eye six months before the second began to fail. The patient smoked half an ounce of shag daily. The eye which had failed first was the first to improve. He also mentioned the case of a man, aged sixty-three, in whom the onset was gradual, and who had a large central scotoma, whose distant vision was bad, whilst his near vision was good. He improved. Strong tobacco was usually the cause, but he had one case where a daily allowance of an ounce of "May Blossom" had caused it, and one where cigars only had been used. He thought it fairly common to find a scotoma in the yellow field, and had once met with a scotoma for all four colours. In two cases there had been a scotoma for white; in one case the scotoma was wholly absent for a time.—Mr. JESSOP had found a history of tobacco-use in all the cases he had seen, and of strong tobacco in all but one. In most of them he thought there had been some sort of trouble. In alcoholic paralysis there was no central scotoma or limitation of the field of vision. He had seen the affection in two women, both smokers.—Mr. MORTON had only seen this amblyopia in tobacco cases. Three teetotalers recovered after giving up tobacco. In one case of persistent pallor of the disc that he had long under observation the vision remained stationary for several years. Once he had seen retinal hæmorrhages. He had not found shock play any part in the causation. Strychnine was useful in his experience. He had seen two cases in men under twenty-three. Shag was the tobacco that most frequently caused it.—Mr. GUNN said that the age was from thirty-five to fifty-five most frequently. The failure of sight was often sudden and rapid, and he thought it occurred more often in those engaged in open-air occupations. He had known half an ounce daily of coarse tobacco cause it. In all cases tobacco had been used, and he believed that both total abstainers and drunkards were more liable to it than moderate drinkers. Only one patient did not recover on leaving off tobacco; considerable improvement followed on lessening the quantity of tobacco used. One patient had been a smoker for fifty years. He had seen one case of late recovery with imperfect vision and persistent pallor. He had never met with a second attack. In a diabetic a very small quantity of tobacco would give rise to it.—Mr. CRITCHETT mentioned the case of a youth who from sixteen to eighteen years of age smoked half an ounce daily. The symptoms were very marked, but complete abstention from tobacco brought about his recovery in three months.—Dr. LITTLE referred to a case of amblyopia from bisulphide of carbon. The patient had been employed in the curing room of some rubber works for three months, when he found his sight failing, and three months later he had extreme failure of vision. The optic discs were pale and hazy; the vessels narrowed; the fields for white and blue contracted, those for red and green absent; smell and taste were numbed, and hearing was affected on one side. A year later, after abstention from his work, he had almost normal vision. In another case there was normal vision and no scotoma, but all the fields were contracted. He also recovered.—Mr. POWER thought that there was still much to be made out by inquiry. He thought that tobacco did not produce these poisonous effects until digestive disorders and anæmia were already established. Many conditions had to be thought of, and he mentioned a case where a searching inquiry brought to light an attack of typhoid fever, as well as a history of excessive drinking and syphilis. He thought that strychnine and iron were of very great advantage in these cases.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

THE ninth and last meeting of the second session of this society was held on June 22nd, Dr. Samuel Sloan, President, in the chair.

Dr. JOHN WILSON (Hillhead) communicated a paper, accompanied by diagrams, on the Best Mode of assisting at the Outlet the after-coming Head. The paper was read and

commented on by the SECRETARY (Dr. Turner).—Dr. PARK then read a paper on the Scientific Dilatation of the Os and Cervix Uteri and Intra-uterine Therapeutics. He advocated the use of the "artificial amnion" invented by Mr. Taylor of Birmingham as being superior to all other dilators in principle and detail. He laid special stress on the fact that the natural method of dilatation was closely followed, being effected really *ab intra*, and not *ab extra*. He also stated that it was more adapted for general use than Barnes' bags, as there was not so much necessity for preliminary dilatation by tents. One introduction through the os and cervix was sufficient, thus avoiding the irksomeness of instruments depending upon the principle of repeated introduction of sounds of larger and larger calibre. There was no solution of continuity of the lining mucous membrane involved, as was almost necessarily the case where dilators acting on the principle of leverage were employed. Passing to the question of intra-uterine therapeutics, he asked the Society if they did not think that the present-day neglect of and fear of intra-uterine medication was being carried too far. He pointed out that we are in the position now of having a great many more remedial agents at our command than we had even ten years ago, and instanced hazeline, resorcinol, cocaine, glycerine, iodoform dissolved in euc. extract, iodol, &c., as remedies which, alone or variously combined, might be used with perfect safety with Braune's syringe.—Dr. W. L. REID doubted whether the use of even antiseptic sponge tents was safe. He had seen two cases of septicæmia clearly traced to their use. He thought the smaller-sized Barnes' bag quite equal to Taylor's instrument. Twenty years ago many cases had been related of injury due to uterine injections, and he thought Dr. Park scarcely seemed to appreciate wherein the true danger lay—viz., in the accumulation of secretion in the uterus, and the contraction of the latter on its contents, with a closed os. He thought not much nitric acid could reach the fundus when administered on a naked probe and not through a cannula. He narrated the means taken by him to reach the interior of a womb the subject of sarcoma, and where the vagina was narrow by reason of senile atrophy. He first dilated the latter by the use of a large Barnes' bag, and was thus able readily to reach the os and dilate it by means of his own screw dilator.—Dr. SLOAN objected to the statement that mechanical dilators were not adapted for general use, and thought sponge tents dangerous.

Reviews and Notices of Books.

Diseases of Women. By Dr. F. WINCKEL. Translated by J. H. WILLIAMSON, M.D. With an Introduction by THEOPHILUS PARVIN, M.D. Edinburgh: Young J. Pentland.

THIS book is described as a manual for students and physicians, and in many respects is very good. It is divided into seven sections, each section treating of the anomalies and diseases of some portion of the genital organs. These are the anomalies and diseases of the external sexual organs; of the vagina; of the uterus; of the Fallopian tubes; of the ovaries; of the uterine ligaments, peritoneum, and pelvic connective tissue; and of the breasts. Each section is divided into chapters, in which are discussed the various deformities and diseases to which the subject of the section is liable. This arrangement of the matter of the book is from a scientific point of view perhaps perfect, but from a clinical aspect it has its disadvantages. The physician, already acquainted with the diseases of women, will feel these disadvantages less than the student who is beginning his study. The first two hundred pages are occupied with the anomalies and diseases of the external sexual organs, and many subjects are discussed in this portion of the volume which are not usually referred to in English text-books. This part of the work is very well done. The third section consists of nearly three hundred pages, and deals with the anomalies and diseases of the uterus. The malformations of this organ are well described in the first chapter of the section. The second treats of the changes in the form and position of the uterus. Naturally, it begins with a discussion of the normal shape and position of the organ, and the author arrives at the conclusion that "it is a movable organ, every breath, every word and action, every variation in the fulness of the rectum and bladder influencing its position. It can, therefore, become abnormal only when the normal mobility of the organ is checked, lessened, or abolished in any given direction—i.e., when the organ is held in a fixed position." It necessarily follows from this definition of the normal position of the uterus, that all displacements of it are only signs of some other disease and not the disease itself. Displacements are classified as follows: (1) Elevation, descent, and prolapsus of the uterus; (2) ante, retro, dextro, and sinistro position; (3) anteversion and flexion, retroversion and flexion, dextroversion and flexion, sinistroversion and flexion; (4) torsion; (5) inversion; (6) herniæ. It is evident to all pathologists, "uterine" and others, that many of the above displacements are simply the results of disease in the immediate neighbourhood of the uterus, and have in themselves no pathological significance. A pretty full account is given of descent and prolapse of the uterus and its treatment. When we come to the chapters on versions and flexions we meet with a curious state of things. "Anteflexion is the normal condition of the virgin and nulliparous uterus, as anteversion is in the parous woman." And these become pathological only when they are permanent. Pathological anteversion and anteflexion usually result from diseased processes external to the uterus, such as peri- and para-metritis. The symptoms are said to depend upon the inflammatory condition coexisting with the flexion. Anteflexion causes no obstruction to menstruation or to impregnation. Yet the author recommends active treatment of various kinds, including stem pessaries.

In discussing retroflexion and version the author does not fall into such inconsistencies. Throughout he treats each as a disease calling for treatment. He discusses the causes of it and the anatomical changes in the uterine walls, and finds the latter to be elongation and thinning of the anterior wall of the uterus, but never thinning of the posterior wall at the angle of flexion. We meet with some extraordinary statements in this chapter. "The hyperæmia, erosions, and ulcerations cause great sensitiveness of the uterine walls, so that many patients will notice every movement of the uterus. Very intelligent patients have attributed the sensation to the movements of a child or some animal, as a tapeworm." What are the sensations due to the movements of a tapeworm? According to Winckel, retroflexion causes anæmia, migraine, hysteria, insanity, and suicide. "In every case therefore," he says, "of general nervousness, hysteria, or chlorosis, a thorough examination of the pelvic organs must be made, and, as Schultze has said, the same course should be taken with patients who are sent to asylums for nervous or mental diseases." If symptoms of displacement have already appeared, young girls should be made to understand the necessity of genital exploration. Perimetric adhesions are to be torn through by manipulation, and pessaries of various kinds should be used; but our author draws the line at laparotomy and Alexander's operation. With regard to the latter, he says "the results hitherto published are by no means favourable, not even encouraging." We know no work in which more incorrect views are inculcated with regard to displacements—views the fallacious character of which has been placed beyond doubt by the works of Herman and Videler, works to which Winckel makes no reference.

In the treatment of inversion Dr. Winckel recommends manual attempts at reposition; and should these fail, the use of the colpeurynter and laparotomy as a final resort when all other means have proved unsuccessful. He disapproves of continuous elastic pressure on the fundus by means of a

cup and stem, and says: "He who has laboured for years with such a case has recognised the pressure which the inverted uterus will withstand, and will condemn as unreliable and dangerous all the sound-shaped instruments with knob, plate, or cup-like attachments, because they act upon too small a portion of the inverted body, and slip far too readily from its smooth surface." It is impossible to accept such a conclusion in face of the many old and chronic cases of several years' standing which have been successfully treated by this means.

The chapter on neoplasms of the uterus is worthy of careful study. Winckel regards oöphorectomy for fibroids as still *sub judice*. He says: "The mortality is over 15 per cent., and the desired result fails in 20 per cent. of those cases not immediately fatal. The value of castration for unoperative (*sic*) uterine myomata therefore remains *sub judice*, and its value, when compared with myomotomy, cannot be definitely determined with our present limited experience."

The fourth section treats of the diseases of the Fallopian tubes, and the fifth of those of the ovaries. The little that is known of the diseases of the tubes is carefully summarised. The section on diseases of the ovaries is good. In this section the operation of spaying is discussed. The author thinks that the cases requiring this operation are rare, and that the operation frequently fails of the desired object. He considers every castration for the removal of ovaries which are not obviously diseased to be a blunder, and believes that cases in which spaying is frequently recommended recover without operative procedure. In this we heartily agree with him. "It is to be hoped," he writes, "that the time is not far distant when the extirpation of the healthy ovary for dysmenorrhœa, ovarian neuralgia, epilepsy, and mental diseases will be classed with clitoridectomy, once so frequently done, although the latter is far less injurious and harmless." The work is on the whole excellent, and will prove very valuable to the gynæcologist, though not so well suited for the beginner.

A Text-book of Pharmacology, Therapeutics, and Materia Medica. By T. LAUDER BRUNTON, M.D., &c. Third Edition. London: Macmillan and Co. 1887.

ALTHOUGH the interest of this new edition of Dr. Lauder Brunton's valuable work centres primarily in his long-promised vindication of his position with regard to homœopathy, it needs but a cursory inspection to prove that he has not thrown away his energies in his trenchant remarks in the preface. His explanation really occupies a comparatively small space; and as we have already dealt with it, any further reference is now unnecessary. In spite of judicious condensations and omissions, the amount of new material for which space was imperatively demanded has increased the size of the book by more than 100 pages since the first edition. In these additions Dr. Lauder Brunton utilises all the more recent facts concerning new remedies and new experimental methods of research; indeed, in applying his critical powers to his own work, he has discovered many opportunities of adding fresh touches to a book which was so well up to date in its last edition as to seem to call for little improvement. Not content with the record of the past, our author furnishes us with numerous prophetic glances into the future of materia medica and therapeutics: he believes that this lies in the wholesale substitution of artificially prepared compounds, of known composition and constant strength, for the far too numerous remedies at present derived directly from the vegetable kingdom—remedies whose constituents and properties are liable to extreme variations from accidental causes. While there is much to be said in favour of some such change, it may well be doubted whether it will bring much satisfaction to medical students—the names and chemical compositions of most new remedies of this type at present being sufficiently appalling, even if not actually misleading; many such drugs are now named according to the symptoms presumably calling for their employment; it can hardly be doubted that some, at least, of these names will eventually prove as evanescent as the term *officinalis* of the older botanical system. That this future, which will so largely revolutionise our studies, is not yet imminent we may gather from the number of new compounds proposed for employment being largely in excess of the number of new therapeutic successes which have been conclusively established. In the meantime, however, due recognition and appreciation must be accorded to Dr. Brunton's honest endeavour to build up a system of scientific therapeutics based upon the results of pharmacological research, and to substitute this for the dreary waste of power formerly expended over mere catalogues of botanical terms.

It is interesting to note that Dr. Brunton promises a small text-book on the connexion between chemical constitution and physiological action—a subject which, from the results of investigations with methyl and ethyl derivatives, appears likely to furnish important indications for therapeutic changes.

The Index of Diseases and Remedies still fails to produce perfect satisfaction, being avowedly little more than a "list of drugs which have been recommended by somebody or other at some time or other in the treatment of certain diseases," and thus it indicates rather what *has been* done than what *should be* done when dealing with any particular symptom or disease.

Several new diagrams have been added to elucidate the text, and on every page are to be found evidences of care in compilation and revision. As a valuable storehouse of pharmacological methods, bristling with suggestions for fresh researches, this book still worthily maintains the unique position assumed by the first edition.

A Treatise on Diseases of the Skin, with special reference to their Diagnosis and Treatment, including an Analysis of 11,000 consecutive Cases. By T. MCCALL ANDERSON, Professor of Clinical Medicine in the University of Glasgow. With plates and numerous other illustrations. London: Charles Griffin and Co. 1887.

PROFESSOR MCCALL ANDERSON has long been known as an authority on diseases of the skin, which he has had unusual opportunities of observing for upwards of a quarter of a century, and various monographs and papers which he has written from time to time on the subject have been much appreciated. The author decided—and, we think, not unwisely—to omit an account of the anatomy of the normal skin, which can be easily studied elsewhere. His main aim has been to make the work a reliable guide to diagnosis and treatment. There are numerous excellent formulæ on each page devoted to treatment, and under Diagnosis diseases liable to be confounded with one another are compared in parallel columns. The space devoted to the anatomy of the lesions is exceedingly limited, except where a discussion of the matter is of practical value. Eczema has a hundred and ten pages devoted to it, or more than one-sixth of the book, and seventy-three of these pages are given to treatment. With his main objects always in view, Professor Anderson's clear style and method are well displayed, and there is no doubt he has so far achieved a considerable success, and has produced a work likely to prove very acceptable to the busy practitioner. Personally, however, we cannot help feeling a certain disappointment, because, with a keen appreciation of Professor Anderson's special qualities and a knowledge of his opportunities and position as a teacher of clinical medicine, we sat down to the study of his work in the hope that we should find some masterly

descriptions of disease, and both acute and practical discussions of some of the more interesting problems of the day in the field of skin diseases. It appears to us that, though no doubt we get the result of his prolonged experience in diagnosis and treatment, his multifarious engagements, the wide range of his studies, and the limited nature of the task he set himself, have prevented him from producing a work quite worthy of his reputation and capacity. The descriptions of disease are mostly short, many by no means full and hardly ever complete, though doubtless the various illustrative cases introduced in the text will be useful. The chapter on erythema we do not like at all; we think it confused, and not abreast of our present knowledge. Roseola annulata, or Erythema circinatum, is stated to be mostly a chronic affection occurring on the chest and back. Is Prof. Anderson not confounding it with the Lichen circinatus of authors? We deprecate also his recommendation of the retention of the term Lichen for papular eczema. In another edition we hope the author will enter fully into the description and treatment of that most troublesome malady called Lichen urticatus. Prof. Anderson has been ably assisted in the description of surgical affections by Dr. Hector Cameron, and by Dr. James Christie in the diseases of foreign climes. The views given in the article on guinea-worm disease are not in accordance with the latest conclusions accepted by the late Dr. Cobbold and other authorities. There are many important omissions and statements to which, if space permitted, we should like to draw attention; but in making these criticisms we do not lose sight of the great merits of the treatise in the somewhat limited field the author has allowed himself to work in.

There occurs in the treatise a serious printer's error, to which Prof. Anderson directs attention in a letter which we publish in another column.

ABSTRACT OF THE

REPORT OF THE COMMITTEE OF INQUIRY INTO M. PASTEUR'S TREATMENT OF HYDROPHOBIA.

THE report of the committee nominated by the President of the Local Government Board in April, 1886, to inquire into M. Pasteur's treatment of hydrophobia, was presented to Parliament on Monday last.

The report commences by stating that it was found necessary that some of the members of the committee should, together with Mr. Victor Horsley, the secretary, visit Paris so as to obtain information from M. Pasteur himself, to observe his method of treatment, and investigate a considerable number of cases of persons inoculated by him; and, further, that a careful series of experiments should be made by Mr. Horsley on the effects of such inoculation on the lower animals. Mr. Horsley's experiments are stated to entirely confirm M. Pasteur's discovery of a method by which animals may be protected from the infection of rabies. If a dog, rabbit, or other animal be bitten by a rabid dog and die of rabies, a substance can be obtained from its spinal cord which, being inoculated into a healthy dog or other animal, will produce rabies similar to that which would have followed directly from the bite of a rabid animal, or differing only in that the period of incubation between the inoculation and the appearance of the characteristic symptoms of rabies may be altered. The rabies thus transmitted by inoculation may, by similar inoculations, be transmitted through a succession of rabbits with marked increase of intensity. But the virus in the spinal cord of rabbits that have died of inoculated rabies may be gradually attenuated by drying the cords, so that after a certain number of days' drying it may be injected into healthy rabbits or other animals without any danger of producing rabies; and by using on each successive day the virus dried during a period shorter than that used on the previous day an animal may be made almost certainly secure against rabies, whether from a bite or from any method of subcutaneous inoculation; and this protection is proved by the fact that if animals so protected and others not thus protected be bitten by the same rabid animal, none of the first set will die of rabies, and, with rare exceptions, all of the second set will succumb.

It may hence be deemed certain that M. Pasteur has discovered a method of protection from rabies comparable with that which vaccination affords against infection from small-pox. It would be difficult to over-estimate the importance of the discovery, whether for its practical utility or for its application in general pathology. It shows a new method of inoculation, or, as M. Pasteur sometimes calls it, of vaccination, the like of which it may become possible to employ for protection of both men and domestic animals against others of the most intense kinds of virus. The duration of the immunity conferred by inoculation is not yet determined; but during the two years that have passed since it was first proved there have been no indications of its being limited. The preventive treatment adopted by M. Pasteur is based on the foregoing experience; but the determination of the success of the method is far from easy, owing to—(1) the difficulty of determining whether the bites were really those of rabid animals; (2) the probability of hydrophobia in persons bitten by dogs that were certainly rabid depending very much on the number and character of the bites, whether they were on exposed parts or parts protected by clothing; and in all cases in the amount of bleeding; (3) in all cases the probability of infection may be affected by speedy cauterising or excision of the wounded parts, or by various washings, or other methods of treatment; (4) the unequal danger of bites of different species of animals, and even of different dogs. In some groups of cases the percentage of deaths among persons bitten by dogs believed to have been rabid has been estimated at only 5 per cent., in others at 60 per cent.; and the mortality from the bites of rabid wolves has been variously estimated at from 35 to 90 per cent.

By the courtesy of M. Pasteur the committee were enabled to personally investigate ninety cases treated by him, these being mostly those which had been earliest treated, in which the periods since inoculation were longest, and living within reach in Paris, Lyons, and St. Etienne. Among the ninety cases there were twenty-four in which the patients were bitten on naked parts by undoubtedly rabid dogs, and the wounds were not cauterised or treated in any way likely to have prevented the action of the virus; there were thirty-one in which there was no clear evidence that the dog was rabid; others in which the bite had been inflicted through clothes. It is estimated, from experience of the results of bites in other cases, that had they not been inoculated, not less than eight among these ninety persons would have died. Not one of them has shown since the inoculation any signs of hydrophobia.

Since, in order to quiet fears, M. Pasteur has been obliged to inoculate many in whom there was no satisfactory evidence that the bite was that of a rabid animal, it might be unjust to estimate the total value of his treatment in the whole of his cases as being more than the rate of mortality observed in them compared with the lowest rate observed in any large number of cases not inoculated. This lowest rate may be taken at 5 per cent.; and, as between October, 1885, and the end of December, 1886, M. Pasteur inoculated 2682 persons (including 127 from this country), the mortality should have been 130. But at the end of 1886 the number of deaths was 31, including 7 bitten by wolves, in whom the symptoms of hydrophobia appeared while they were under treatment; in fact, the actual percentage mortality was between 1 and 1·2, showing, on the lowest estimate, the saving of not less than 100 lives. Of 233 persons bitten by animals in which rabies was proved, only 4 died. Without inoculation at least 40 would have died. Among 186 bitten on the head or face by animals in which rabies was proved, only 9 died, instead of at least 40. Of 48 bitten by rabid wolves, only 9 died, instead of nearly 30. Between the end of last December and the end of March M. Pasteur inoculated 509 persons bitten by animals proved to have been rabid; only 2 have died, one of these, bitten by a wolf a month before inoculation, dying after only three days' treatment. The committee think it therefore certain that the inoculations practised by M. Pasteur have prevented the occurrence of hydrophobia in a large proportion of those who, if they had not been so inoculated, would have died of

that disease. And his discovery shows that it may become possible to arrest by inoculation, even after infection, other diseases besides hydrophobia. His researches have also added very largely to the knowledge of the pathology of hydrophobia, and supplied a sure means of determining whether an animal which has died under suspicion of rabies was really affected with that disease or not.

The question whether the method itself entails risk to health or life is then discussed, the distinction between the ordinary method and the "intensive" method being pointed out. By the first method there is no evidence or probability of any danger to health at all; but after the intensive method, which is only practised in the most urgent cases, deaths have occurred which might possibly be attributed to the inoculations rather than to the original infection. Yet in the worst cases the intensive method is relatively more efficacious than the ordinary method, nor is the rate of mortality greater after the former method than after the latter. Certain cases, one of which is detailed, have, however, excited suspicion from the mode of death. The case related is that of a man bitten by a rabid cat at the Brown Institution, treated by M. Pasteur the next day by the intensive method, continued during twenty-four days, and dying about a month later with symptoms of acute ascending paralysis. The man was very intemperate, and had been exposed to chill while crossing the Channel on his return home. Mr. Horsley proved that his death was due to the virus of rabies, by using a portion of his spinal cord for the inoculation of rabbits and dogs, who died with characteristic signs of paralytic rabies such as usually occurs in rabbits. Yet it is by no means certain that the fatal issue in this and in other cases treated by the intensive method was not due to the original infection. M. Pasteur has, however, greatly modified this plan of treatment, which he employs in none but the most urgent cases.

The final paragraphs of the report, which embody practical suggestions, may be given *in extenso*:—

The consideration of the whole subject has naturally raised the question whether rabies and hydrophobia can be prevented in this country. If the protection by inoculation should prove permanent, the disease might be suppressed by thus inoculating all dogs; but it is not probable that such inoculation would be voluntarily adopted by all owners of dogs, or could be enforced on them. Police regulations would suffice if they could be rigidly enforced. But to make them effective it would be necessary (1) that they should order the destruction, under certain conditions, of all dogs having no owners and wandering in either town or country; (2) that the keeping of useless dogs should be discouraged by taxation or other means; (3) that the bringing of dogs from countries in which rabies is prevalent should be forbidden or subject to quarantine; (4) that in districts or countries in which rabies is prevalent the use of muzzles should be compulsory, and dogs out of doors, if not muzzled or led, should be taken by the police as "suspected." An exception might be made for sheep dogs and others while actually engaged in the purposes for which they are kept. There are examples sufficient to prove that by these or similar regulations rabies, and consequently hydrophobia, would be in this country "stamped out," or reduced to an amount very far less than has hitherto been known. If it be not thus reduced, it may be deemed certain that a large number of persons will, every year, require treatment by the method of M. Pasteur. The average annual number of deaths from hydrophobia during the ten years ending 1885 was, in all England, 43; in London alone, 8·5. If, as in the estimates used for judging the utility of that method of treatment, these numbers are taken as representing only 5 per cent. of the persons bitten, the preventive treatment will be required for 860 persons in all England; for 170 in London alone. For it will not be possible to say which among the whole number bitten are not in danger of hydrophobia, and the methods of prevention by cautery, excision, or other treatment, cannot be depended upon.

The report is furnished with an appendix containing (A) an abstract report of Mr. Horsley's experiments; (B) a report on persons in France examined by members of the committee, with a list of English persons treated at the Pasteur Institute from Jan. 1886 to Jan. 1887; and (C) on M. Pasteur's methods of preventive inoculation. The report is signed by James Paget (chairman), T. Lauder Brunton, George Fleming, Joseph Lister, Richard Quain, Henry E. Roscoe, J. Burdon Sanderson, and Victor Horsley (secretary).

THE HOSPITAL SUNDAY FUND.

THE following are the principal contributions which have been received by the Secretary of the Hospital Sunday Fund since the publication of our last list:—Camden Church, Camberwell, and Sunday-schools, £103; Christ Church, Gipsy-hill, £79; St. Bartholomew's, Sydenham, £92; Holy Trinity, Roehampton, £52; Holy Trinity, Lee, £59; St. Paul's, Knightsbridge, £451; All Saints', Camberwell, £60; St. Stephen's, South Dulwich, £147; St. Paul's, Onslow-square, £322; St. Mary's, Kilburn, £78; St. Michael's, Stockwell, £51; St. Michael's, Blackheath-park, £64; St. Paul's, South Hampstead, £104; Emmanuel Church, Maida-vale, £71; Christ Church, Hampstead, £164; St. James's, Holloway, £107; St. Augustine's, Highbury, £65; Christ Church, Chislehurst, £61; Chapel Royal, Savoy, £50; Church of the Annunciation, Chislehurst, £61; St. Margaret's, Westminster, £202; Bloomsbury Baptist Chapel and Mission, £54; All Saints', Ennismore-gardens (corrected), £362; St. Mark's, Hamilton-terrace, £295; Christ Church, Highbury, £113; St. Paul's Presbyterian Church, Westbourne-grove, £63; Hampstead Parish Church, £70; St. Stephen's, Ealing, £129; Christ Church, Marylebone, £52; St. Peter's, Dulwich Common, and St. Dunstan's, £51; St. James's, Kidbrook, £141; St. John's Presbyterian Church, Forest-hill, £87; Clapham Parish Church, £58; St. James's, Piccadilly, £132; Holy Trinity, Sydenham, £120; Brixton-hill Wesleyan Chapel and Schools, £79; St. Marylebone Presbyterian Church, £58; St. James's, Paddington, £189; Trinity Church, Marylebone, £84; Lewisham High-road Congregational Church, £57; St. Mary's, Boltons, £68; St. Gabriel's, Pimlico, £109; St. Mary's and St. John's Churches, Putney, £87; St. Luke's, Redcliffe-square, £51; St. George's, Tufnell-park, £68; Brunswick Chapel, Upper Berkeley-street, £101; Mrs. C. Buxton, £100; Holy Trinity, Tulse-hill, £53; St. Columba, Pont-street, £100; All Hallows, Upper Thames-street, £50; Christ Church, Hornsey, £84; Christ Church, North Brixton, £53; St. Saviour's, Paddington, £74; Greek Church, £84; Allhallows, London-Wall, £50; Kensington Congregational Chapel, £72; St. Paul's, Upper Norwood, £57; St. Mary Magdalene, Paddington, £63; St. George's, Bickley, £74; Regent-square Presbyterian Church (Dr. Dykes), £137; Clapham Congregational Church, £80; St. Jude's, East Brixton, £63; Streatham Parish Church, £68; St. Mary's, Balham, £73; St. Margaret's, Lee, £82; St. John's, Notting-hill, £98; Brompton Church, £421; St. Thomas's, Portman-square, £117; All Saints', Clapham-park, £55; "Delta" (a further), £200; John Smith, Esq. (a further), £50; Earl of Rosebery, £50; St. Mary's, Bryanston-square, £107; Holy Trinity, Upper Chelsea, £196; St. Paul's, New Beckenham, £116; St. Peter's, Bayswater, £124; St. Mary Aldermary, &c., £83; Holy Trinity, Paddington, £216; Union Chapel, Islington, £151; St. George's, Hanover-square, £154; All Saints', St. John's-wood, £68; St. Paul's, Camden-square, £71; St. Michael and All Angels, Paddington, £192; Anonymous, £100; Church of the Ascension, Balham, £53; St. Thomas's, Westbourne-grove, £74; All Souls', Langham-place, £89; Immanuel Church, Streatham-common, £80; Christ Church, Mayfair, £83; St. Barnabas, Pimlico, £64.

The total amount received by the Secretary of the Fund up to the time of our going to press is about £28,500.

CAMBRIDGE MEDICAL GRADUATES' CLUB. — The annual dinner of the Cambridge Medical Graduates' Club was held at the Hotel Victoria, Northumberland-avenue, on Wednesday, June 29th, Mr. Timothy Holmes occupied the chair. The club on the occasion entertained as its guests the President of the General Medical Council, the President of the Royal College of Surgeons of England, and the Directors-General of the Army and Navy Medical Departments. The members and their guests present at the dinner numbered fifty-three; later in the evening most of those present adjourned to the conversazione of the Royal College of Physicians. The Cambridge Club is in a very prosperous condition, and now numbers over 200 members.

THE LANCET.

LONDON: SATURDAY, JULY 2, 1887.

THE report of the Hydrophobia Committee has appeared at last, and, it must be confessed, its character supplies a sufficient reason for the delay that has occurred in its production. To consider the evidence that has been accumulated at the Pasteur Institute, and to form an opinion as to the alleged results, could not, indeed, have needed so long a time as a whole year; but to verify those results by independent investigation, to test the practical value of the inoculations as a means of preventing hydrophobia, must, it is evident, require a considerable time; and the Committee is to be congratulated on having attained a definite conclusion in the time they have taken.

The definite character of the conclusion reached will probably render the report a surprise to most members of the profession who have compared the divergent opinions that have been so freely expressed by men not ill qualified to judge, and have duly realised the difficulty of the investigation and the many sources of fallacy arising from the character of the facts themselves. It is certainly satisfactory that men so well able to weigh the evidence and to observe the facts, after having had the fullest opportunity of investigating the results obtained at the Pasteur Institute, should have come with one accord to an opinion so precise. Without doubt, their verdict is the most important yet pronounced upon the subject, and must go far to decide the question of the prophylactic value of the inoculations of PASTEUR.

The process itself was studied in Paris by three members of the Committee — Sir HENRY ROSCOE, Dr. BURDON SANDERSON, and Dr. LAUDER BRUNTON. A series of experiments were instituted after the return of these members by Professor VICTOR HORSLEY, while the other members of the Committee, Sir JAMES PAGET, Sir JOSEPH LISTER, Dr. QUAIN, and Dr. FLEMING, formed an opinion on the facts submitted to them. Those facts are fully stated in an appendix to the report, so that it will be possible for all persons who are interested in the subject to weigh the evidence and the conclusions. It can hardly be doubted that those who are competent to form an opinion will agree in the main with that expressed by the members of the Committee.

It must not be assumed that all parts of the report are of equal value. We have alluded to the sources of fallacy that lurk in the statistics of PASTEUR; the members of the Committee have taken due account of them, and have endeavoured as far as possible to avoid them. To eliminate them altogether is impossible, and the conclusions reached cannot have more than a very high degree of probability. But it is otherwise with the experiments instituted by the Committee: these are apparently free from all sources of error. They are not numerous, it is true, but their results are unequivocal, and seem to leave no room for doubt that the inoculation with the weakened virus of rabies confers an immunity from the disease. The inoculation with emulsion of the spinal cord of rabid rabbits preserved a series of dogs from rabies, although the most certain conceivable method of inoculation was employed—a bite from an animal in the acute stage of the disorder. In no case did the animal contract rabies, whereas of other unprotected animals bitten at the same time the majority contracted the disease. The experiments thus seem to leave no doubt of the efficiency of inoculation in rendering harmless a subsequent infection. They prove that the malady, as produced by the attenuated virus, is trifling, and they thus confirm two of the most important statements of PASTEUR. On the question whether inoculations, made after a bite has been inflicted by a rabid animal, confer the same immunity — a question of paramount importance — the original researches throw no direct light. But the confirmation of the conclusions of PASTEUR, in so far as they have been reinvestigated, is not without its significance, for it naturally increases the readiness to accept also those conclusions that have not been the subject of independent study. The statistics of PASTEUR have been subjected to a careful examination by the Committee, and the conclusion from the analysis is entirely in favour of PASTEUR's method. A considerable number of cases were personally investigated, so far as investigation was possible after the lapse of a considerable time. The facts of these cases, the means employed to prevent infection—washing, cauterisation, &c.,—and the evidence as to the condition of the dog which bit the patients, are described in the appendix to the report. The conclusion drawn from these facts is that in many of the cases the dog was unquestionably rabid, and that a certain proportion of the sufferers would have died from hydrophobia if they had not been treated, and who, being treated, have not suffered from the disease. The conclusion that the method has saved a considerable number of lives, and that it is at present, and probably will be for long, the only mode of saving from death those who have been bitten by a rabid dog, affords strong support to PASTEUR's conclusions, and, we need hardly say, must have most important practical results.

Nor is this all. By the opponents of PASTEUR it has been alleged that the dangers of his inoculation are scarcely less than those of the bites of rabid animals. It has been stated that many deaths have occurred in consequence of the treatment, and that some of the patients have actually been affected with paralytic rabies in consequence of the inoculations. On this point also the verdict is in favour of PASTEUR. It is, perhaps, doubtful whether this verdict rests on so firm a foundation as does that of the protective power of the treatment. The report confines itself to one of the cases of death after the treatment, the case of the man GOFFI, who was bitten at the Brown Institute and died in St. Thomas's Hospital. On this case the report throws a new and startling light. It will be remembered that the cause of death was spinal paralysis, and its connexion with rabies was denied. Mr. HORSLEY proves that the disease was paralytic rabies; the results of inoculations make the fact unquestionable. The treatment was certainly unsuccessful, and it is suggested that almost continuous intoxication may have prevented its success. Was the malady due to the original infection or to the "preventive treatment?" The Commitee suggest the former

as the probable cause, that paralytic rabies may be more common than is supposed, and that the disease known as acute ascending paralysis, or LANDRY'S paralysis, may be, often at least, paralytic rabies. If this conclusion be correct, it is strange that paralytic rabies should not be observed more frequently as the distinct sequel to the known bite of a rabid animal. It seems more probable that, if the death of GOFFI was the result of the bites he received, the form of the malady was determined by the influence of the inoculations. But the conclusion of the Committee seems to be that, although the strong virus formerly employed may have entailed some evil consequences, the method now employed is free from serious danger.

We have said that the report of the Committee can hardly fail to have important practical results. The Government has ordered the inquiry in response to a public demand, and, the verdict being so clear and strong, the establishment of a Pasteur Institution in this country seems now to be their clear duty. Whatever other effect the report may have, it will certainly compel increasing numbers of persons who have been bitten by dogs, rabid or not rabid, to seek what is said to be a certain safeguard against a terrible possibility. That they should have to go to a foreign country for the treatment, which the Government Committee consider some at least of the bitten persons will require, will be intolerable. The inevitable result of the report must surely be the establishment of a Pasteur Institute in this country, and after such an answer as the Government has received to its inquiries the task can scarcely be left to private benevolence.

THE movements in favour of granting degrees to London medical students are steadily being pressed forward, and some very important decisions in reference to them have recently been arrived at. The Colleges of Physicians and Surgeons have adopted the resolution of their delegates, declaring the inexpediency at present of holding any conference with the Councils of University and King's Colleges for the purpose of procuring powers to grant degrees in Arts and Sciences, and their decision to proceed conjointly, and independently of other bodies, with their endeavour to obtain the right to confer degrees in Medicine and Surgery. The delegates of the Royal Colleges have also submitted for approval drafts of a petition and Charter, and these, having also been passed by the Fellows of the College of Physicians and the Council of the College of Surgeons, will at once be laid before the QUEEN in Council. By the Charter, which is published in another column, power is sought to form a governing body of forty-eight persons—twenty-four from each College—to be called the Senate of Physicians and Surgeons, to whom shall be entrusted the framing of the necessary regulations and the authority to see that such regulations are complied with. The Council of the College of Surgeons is composed of twenty-four members, and these will, as elected, become the representatives of that College on the Senate, whilst twenty-four Fellows of the College of Physicians are to be chosen, three of them to go out of office annually, but to be eligible for re-election. We cannot but think that this eligibility for re-election is a mistake, for it will allow only a minimum of change, and the Senate will practically become a permanent body, devoid of a sufficient number of young members to enable it to readily adapt itself to changes in teaching and examination. An error similar to that committed by the founders of the University of London should have been avoided. The President of the Senate will hold office for two years, and will be in succession the President of the College of Physicians and of Surgeons respectively, whilst two Vice-Presidents will be elected annually from among the members of the Senate. Twelve members are necessary to form a quorum and the vote of the majority present is to be decisive. The degrees in Medicine and Surgery are to be conferred on any person who, "by passing the examinations formerly held by both of the Colleges separately, or by passing the examination held by the Examining Board of the two Colleges, or by passing any other examinations to be held by the two Colleges jointly or separately, has already acquired, or may hereafter acquire, the qualifications for registration under the Medical Act, and who shall have also complied with such further regulations (if any), or undergone such further examination (if any), as the Senate may from time to time see fit to impose or require." The past Licentiates of the College of Physicians and Members of the College of Surgeons will by this clause be placed on exactly the same footing as those who qualify in the future, and this just and far-reaching provision will secure a wide amount of sympathy among the members of the profession in favour of the movement. The questions of an additional examination or examinations and of a title are left open for future discussion, and are therefore omitted from the Charter.

The refusal to confer with University and King's Colleges has compelled those bodies to take separate action, and they will have the full support of the Association for promoting a Teaching University in London. The Councils of these Colleges have now agreed on asking for a joint Charter to found a new university in London on the lines of the Victoria University in Manchester, with power to confer degrees in Arts, Science, and Medicine. Every student must have pursued a course of study in a college in the university, and, for medical study, the other medical schools of London are to be included. A Teaching University, such as exists in Scotland and in the north of England, would then be available for London students. The discussion as to the advisability of applying for such a Charter led to the resignation from the Council of University College of those members who were most closely identified with the University of London, but these vacancies have now been filled up. Mr. ERICHSEN takes the place of the Earl of KIMBERLEY, and Sir R. N. FOWLER that of Sir JULIAN GOLDSMID; while Sir U. J. KAY-SHUTTLEWORTH, Dr. RUSSELL REYNOLDS, Messrs. BENSON, DIGBY, and ROMANES have become members of the Council. The application for a Charter will be at once made, so that the advisers of the QUEEN in Council will have the two requests before them at the same time. The division among the old members of the Council of University College evidently points to an active opposition by the supporters of the existing university to the formation of a new Teaching University, and this movement is in most danger from this quarter. The universities, as a body, the other professional corporations, and the provincial medical schools

will all oppose the granting of a Charter which shall give the power of conferring degrees in Medicine and Surgery to the Royal Colleges of Physicians and Surgeons. As this opposition is based on various grounds, some of which are just and tenable, whilst others are merely selfish, we must again advise the appointment of a Royal Commission before whom the arguments for and against this shall be fairly urged and weighed, and this should be appointed at an early date.

THE *Spectator* has recently published a kindly article on the uses of medical etiquette and the amenities which regulate the profession, based on the recent judgment of Lords COLERIDGE and DENMAN, that the medical attendance purely by an unqualified assistant cannot be legally charged for. Our contemporary points out that English law very characteristically provides, not that men shall not take the advice of the unqualified, nor, as in other States, that the unqualified shall be prohibited from giving it, but only that such advice shall have no legal value. He thinks that this disadvantage or disability is fairly efficient. Ignorant and unqualified practitioners are a foil which sets off rational and scientific medicine. Their very ignorance may occasionally make a slight success for them easier than for an educated man, as Sir JAMES PAGET charitably thinks is the case with the bone-setters in exceptional cases. Such an admission is the very cream of charity, and must not be abused by being treated as an admission that generally ignorance is an advantage. The achievements of ignorance in the bone-setting line, taken as a whole, are a fraud, and sometimes a tragedy. It is gratifying to read in our contemporary such a vindication of the customs of professional modesty and etiquette, which do not permit medical men to forget that they are gentlemen, and which prohibit advertising, the disparagement of brother medical men, and all vulgar methods of attracting attention or seeking patients. In these days when some newspapers that ought to know better are ready to cater for those who forget such rules, and to receive money for their advertisements, it is pleasant to have to thank a contemporary for putting a just estimate on medical etiquette, which in the long run benefits the public quite as much as the profession. The *Spectator* dwells on the unseemly and injurious consequences that would result if the strict rules of professional ethics were relaxed, and medical men were permitted to imitate quacks in their boasting and advertising methods. "Given," it says, "keen competition and no artificial restraints on a man's power to push himself by advertisement, and we should of necessity have the humiliating spectacle of men bidding against each other in promises to relieve human suffering and to save life." This humiliating spectacle is, alas! occasionally seen, in spite of all the bye-laws of Colleges and the great unwritten traditions of the profession against such practices. The competition, arising chiefly from too great numbers in the profession, does occasionally appear painfully in practices at which our predecessors would have blushed. We do not imagine that any qualified medical man distributes a circular or a card through his neighbourhood without a sense of shame or without the compulsion of want. However this may be, we are thankful to say that such practices are still so unusual as to excite a shock in the ordinary professional mind, and to bring censure and discredit on those who resort to them. Even the Colleges occasionally still exercise their power and discharge their duty in punishing those who do so. It would be a great support to them if our lay contemporaries would imitate the *Spectator*, and expound to the public the value of a code of rules which excludes the arts of trade and the methods of business. We have no wish to restrict the liberty of patients. Patients have a right to consult whom they please, and to change their medical advisers if they see fit to do so, but they will make a woful use of their liberty if they forget the essential difference between a profession and a trade, or expect from their medical man the airs and arts of a tradesman, and change one who despises such arts for one who uses them. Medicine is not a profession that can be so used with advantage: but the very opposite. The best members of the profession best know that medicine has its limits; it cannot achieve the impossible or cure the incurable. Where pretence and boasting and disparagement of others begin, science ends. Men who are suffering from grave diseases, and are not all at once relieved, are apt to give ear to those who will promise immediate cures. They cannot be severely blamed if they do. But it is otherwise with the medical man who takes advantage of those who are willing to believe the impossible. The man who takes advantage of suffering to delude it and to profit by it is amongst the meanest of men, and it will be a bad day for the profession and a worse one for the public if the Colleges and the Medical Council ever cease to regard such men as guilty of conduct disgraceful in a professional respect.

The very progress of medicine, and its tendency to subdivision into specialties, render the preservation of its code of morals more important than ever. The public is helplessly at the mercy of its medical advisers, who have to report on facts of which the patients can often know nothing. The refinements of diagnosis, and the growing sensitiveness of the race under highly artificial conditions of existence, make honesty and perfect moral simplicity in the doctor qualities of prime value. Such qualities were prized in the time of HIPPOCRATES, whose great rules of professional life require medical men to practise their art with modesty, and to treat the sick with consideration and their brethren with respect. *A fortiori*, they are needed now.

THERE are but few aspects of the remarkable progress which has characterised the fifty years' reign of our Sovereign upon which we can look back with greater satisfaction than that which is identified with the influence of preventive medicine on the health of the public Whether regarded from the scientific or the administrative point of view, the benefits which have accrued to the population of this country must be held to have been immense, and they are indicated alike in the lessening of mortality, in the increase of health and comfort, and in the diminution of the misery which so invariably follows on the prevalence of preventable disease. When the QUEEN first came to the throne there was no general system of registration of death and its causes; small-pox, typhus and other continued fevers, scarlet fever, cholera, and other epidemic diseases, were all but uncontrolled; except for the

partial acceptance of the protection against small-pox which had followed on the great discovery of JENNER, there was no organised method of dealing with infectious disease, and even intelligent people were inclined to look to the heavens above and to the earth beneath, and to talk of meteoric and telluric influences, in seeking an explanation of epidemics. All this is now changed; we know that the diseases in question are essentially preventable, and a host of ardent workers are labouring in their various departments to control those elements of disease which heretofore wrought unrestrained mischief among the people. Step by step the country has been educated to appreciate the advantages of health; and as the lesson has been learnt, whether as the result of the labours of past or present teachers, or of prevalences of disease such as the cholera epidemics which occurred between 1849 and 1866, the laws of health have been embodied in statutes, a central health authority has been established, and every district throughout the country has been provided with an officer who is locally regarded as fitted to impart to others the information he possesses in that branch of medicine which deals with the prevention of disease.

Nowhere has the change been more marked than in regard to town life. Our cholera epidemics fastened upon the crowded courts and alleys where water, drainage, and all sanitary surroundings were foul; typhus settled itself firmly in those portions of our cities where there was dense overcrowding of houses on area and of people in houses, and where unventilated, dark, and unhealthy cellar dwellings abounded. As soon as these facts were appreciated, the remedy was applied on a scale which is wellnigh astounding; for, grumble as we may at the need for more rapid progress, it should not be forgotten that during the past ten years alone some sixty millions sterling have been raised for purposes essentially sanitary in their character. Unwholesome dwellings have been swept away by the thousand, filth-sodden towns have been sewered and have been provided with water from sources no longer open to suspicion of pollution, and house drainage has been improved on the widest scale. It is difficult to set out precisely what has been the effect of all these measures. But, taking continued "fever" as a type of that class of disease which is eminently controllable by such measures, we find that, whereas in the five years 1851-55 the death-rate per million living from that group of affections was 995, it has almost continuously fallen, until it is now but little over 290. Here alone the saving of life has been immense.

The promotion of vaccination by a State organisation has also had a remarkable effect upon small-pox. When Her Majesty's reign began, people were still dying of small-pox at the rate of nearly 60 per 100,000 per annum; now, and this in spite of ill-advised and ignorant attempts to prevent the general acceptance of vaccination as a preventive of that disease, small-pox only kills a tenth part of those who formerly fell victims to it. With measures of compulsory notification of infectious diseases, the provision of hospitals for the isolation of the sick, and regulations as to attendance at State-aided schools, great efforts are being made to control diseases, such as measles, scarlatina, and diphtheria, which still cause lamentable mortality amongst our infantile population. And as regards imported diseases, such as cholera, the nation, abandoning its trust in antiquated methods, such as quarantine, trusts more and more to the removal from our midst of those conditions which enable such infections to obtain a footing amongst us.

Much of the work which has led to these several administrative changes has been brought about by the medical department of the State under the guidance of its first and its present medical heads. But the labours of that department have by no means been confined to the perfecting of administrative measures. Scientific and skilled research has gone hand-in-hand with such work, and the results obtained have, as a matter of fact, formed the basis and ground of the administrative advice tendered. The prosecution of sanitary science in England has achieved some great successes. The discovery of the relation between soil-wetness and death from phthisis which was made over twenty years ago by Dr. BUCHANAN, the masterly work of Dr. BALLARD in searching out the connexion between milk and enteric fever in Islington in 1870, and the recent discovery by Mr. POWER and Dr. KLEIN of the connexion between scarlet fever in the human subject and the use of milk from specifically diseased cows, are instances of the sort of work which has made a permanent mark in the history of our sanitary progress. And a host of others have been sedulously labouring in allied directions; the study of micro-organisms and their connexion with infectious diseases having especially enlisted a number of workers, and having already done much to elucidate the question of the origin of infection.

We may, without undue boasting, confidently assert that nowhere has sanitary science made such progress as in this kingdom, and nowhere has a State been served by a body of workers more skilled or untiring. And yet on an occasion when the State had a remarkable opportunity publicly to recognise those who have served their country with merit and distinction, although it must afford universal gratification that a past master in the science of sanitation, Sir JOHN SIMON, has received the well-deserved honour of K.C.B., no member of our profession at present engaged in the active work of preventive medicine has received recognition by the bestowal of a titular honour.

THE College of Physicians is unable to determine whether leprosy is contagious or not. Those who believe that the exhaustive inquiry, in which the late Dr. GAVIN MILROY took so prominent and important a share, conducted by the College twenty years ago, had definitely settled the point, may be surprised at the above statement. The report of the Leprosy Committee then stated:—

"The all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the diseased. The evidence derived from the experience of the attendants in leper asylums is especially conclusive upon this point. The few instances that have been reported in a contrary sense either rest on imperfect observation, or they are recorded with so little attention to the necessary details as not to affect the above conclusion. That leprosy is rarely, if ever, transmissible by sexual intercourse, when one of the parties has no tendency whatever to the disease, is the opinion of the great majority of the respondents who have had the largest opportunities of observation."

Such a definite and well-founded opinion could not fail to carry weight with it; and there is no question that it did good service in helping to further dispel the ancient belief in contagion, a belief which had already largely died out. Nevertheless the question was not closed. In scientific circles it was decidedly reopened when HANSEN discovered in 1874 the bacillus lepræ—a discovery which has been repeatedly confirmed, and which has established the position of the disease in the same category as tubercle, syphilis, and glanders as an infective disease. But even this discovery does not of itself point to the disease being contagious in the ordinary sense, no more than the discovery of the tubercle bacillus established the contagiousness of phthisis. What it does do is to suggest the dependence of leprosy upon a specific virus, and the liability under certain conditions of its transmission from the sick to the healthy. Nor has the idea of contagion died out amongst those who are brought into daily contact with the disease. The circumstances which have reopened the question at the College of Physicians show this. A communication was addressed to the College by the Colonial Office, pointing out that very many medical men practising in the colonies were unable to assent to the views declared by the Leprosy Committee of the College that the disease is not contagious, and the Colonial Secretary desired to know whether the College still adhered to that opinion, and particularly whether measures for the isolation of lepers were justified. This communication was referred to a committee, who presented a report, which showed that the members of the committee were not unanimous in upholding the previous declaration of the College, and the report had to be drawn up in terms which left this question in a more ambiguous state than ever, although it affirmed definitely enough the reasonableness as well as the propriety of the foundation of State-aided leper asylums on grounds of humanity, quite apart from any doctrine of contagion.

The resolution arrived at by the College at the close of a rather desultory discussion was a right one, and perhaps under the circumstances unavoidable. It could not but be felt, in the face of the committee's report, that the subject of the contagiousness of leprosy was one which had not yet been finally determined; and having in 1867 investigated the subject so fully, the College of Physicians would have failed in a public duty if it had declined to renew its investigations with the added experience of twenty years. At the same time such an inquiry, to be effective, would be costly and prolonged. In the interest of the Colonial Empire it is requisite that the Government should furnish the funds to render the investigation a thorough one. It was therefore a proper course to refer the report back to the committee, in order that a statement of the present position of the subject might be appended, together with the opinion of the desirability of a further investigation by the College under the ægis of the State.

WE have already published the names of candidates for the vacancies in the Council of the College of Surgeons caused by the annual retirement of certain of its members, and again urge the desirability of electing only such gentlemen as are known to be in sympathy with the reform party of the constituency. We must express regret to find that one only of the three retiring members of Council will not again come forward, and this one not by any means the senior of the three. Mr. WOOD, who does not seek re-election, doubtless has good reasons for retiring, and we must respect these reasons as valid. Sir SPENCER WELLS, who is coming forward for re-election, has made his mark as a surgeon; he has been twice elected to the Council, and has served the office of president. Surely he has had his share of office, and might now reasonably seek rest from his labours. It will scarcely, we imagine, be urged, even by his best friends, that his special knowledge of the affairs of the College or his administrative capacity is such that the Council would be seriously crippled by his retirement. Mr. HUTCHINSON is also seeking re-election. Besides being a most distinguished and many-sided man, he is in the full vigour of middle age; with him re-election presumably means nothing less than the presidency. We wish Mr. HUTCHINSON every success in his candidature, and the near realisation of his most natural and laudable ambition, the presidential chair, though this may not be accomplished until next year, as we believe there is a probability of the present President, Mr. SAVORY, being re-elected. As regards the other vacancies, no more fitting candidates could be found than Mr. COUPER and Mr. WILLETT. They possess the necessary knowledge of students and young practitioners, and are in sympathy with their aspirations and requirements. Moreover, they are men known for their advanced and liberal views on College matters; they have already given much thought and attention to what we may call "College politics," and would thus go to the Council with that knowledge (so few new members possess) which would fit them at once to deal with the questions that will come before the Council. Both Mr. COUPER and Mr. WILLETT are believed to be in general accord with the views put forth and approved by large majorities at the general meetings, and with which Mr. R. B. CARTER, another of the candidates for office, is notoriously not in accord, unless the events and reflections of the last six months have brought about changes in opinion which he has not yet had the opportunity of making public. The absence of provincial candidates is perhaps not unnatural at the present juncture. There are already four provincial Fellows in office, and many of the London Fellows (who form the staple of the voters under the existing rules of personal voting) think this a sufficiently liberal representation. By next year compulsory personal voting will probably have been abolished. We can hardly doubt that the relative proportion of town and provincial councillors will undergo marked changes within a short time, and that the provincial Fellows will secure for themselves more adequate representation than at present. Let us concern ourselves, however, with actualities—the coming election,—and seek to get the best men for our present purposes. Instead of seniors approaching the end of their career, with flagging interests, the Council ought to consist either of men engaged in teaching or in other ways in touch with students and their requirements, or of men from among the actual workers and toilers of the profession, personally conversant with the defects and deficiencies of the present professional organisation, and presumably, therefore, most competent to apply the remedies that may be needful for its improvement.

Annotations.

"Ne quid nimis."

THE HENLEY REGATTA AND THE NEW BYE-LAWS.

WHEN last week we spoke of the bye-laws drawn up to prevent the contamination of the Thames water by the house boats and steam launches, we complained that ever since last February they have been waiting the sanction of the Queen in Council. This sanction, we were informed, might be given in three days, three weeks, or three months. It seems, however, that we have not called public attention in vain to this grievance, for no sooner had we announced our intention of dealing fully with the question than somehow or another the procrastination of the authorities was overcome and the Royal sanction obtained. The new bye-laws are published in last Saturday's *Gazette*. This experience is very similar to what occurred last year. The Thames Conservators were fully aware that the congregation of so many house boats at Henley endangered the water supply of London. They had, we believe, even drawn up a project for bye-laws to meet this grievance, but it was not till our report on the contamination of the Thames at the Henley regatta appeared that a serious effort was made to bring the matter forward. The project was taken out of its pigeon-hole and advertised. This, as we have already explained, elicited protests and necessitated some modifications, and under these circumstances the Royal assent could scarcely have been obtained before the month of March. This would have been time enough to alter the drainage of the house boats for the present regatta. Nothing, however, was done. No pressure, apparently, was brought to bear, and the affair remained dormant till once more we took the matter in hand. No sooner was this known than, with marvellous celerity, the Queen's assent was procured, and the new bye-laws were published—this, too, in Jubilee week. To say the least of it, the coincidence is very striking, and we may fairly congratulate ourselves on having manifestly contributed to bring about an important sanitary reform. Unfortunately, the publication of the bye-laws in the *Gazette* at so late a date can really only serve to disarm criticism. A new law cannot be enforced in a couple of days; but the fact that the boats are now for the most part collected at one spot will render it easier for the authorities to convey to all whom it may concern knowledge of what is expected in respect to the new sanitary regulations. This, we trust, will be done with the utmost promptitude and rigour. It is monstrous that the house boats of wealthy people who congregate at Henley merely in the pursuit of pleasure should be allowed to drain direct into the water which the greater portion of the inhabitants of the metropolis are obliged to drink.

HOSPITAL MANAGEMENT.

AN excellent institution in the east of London, which has for the past twenty years done so much good work—we mean the East London Hospital for Children,—has unfortunately been disturbed by an incident which, however regrettable in itself, will, we trust, be not without good result. At the last general meeting of governors, held about a month ago, Mr. R. W. Parker, who personally has worked without ceasing on behalf of the institution, drew attention to the fact that many of the lay members of the Committee were conspicuous for their absence at the business meetings. He was confirmed in this by other speakers, notably by the late chairman, Mr. Charrington, who intimated that he would not have resigned office had the attendance been more satisfactory. An addendum to the motion for the adoption of the report, calling on the Board of Management to take early steps to rectify this defect, was moved by Mr. Parker, and carried by the meeting. This is only what should be. If gentlemen take office on a hospital board, they should perform the duties entailed by that office; but we fear it is too often the case for members of such boards to be content to leave the direction in the hands of a few. This is much to be deplored, for not only does it appear to show a lack of interest in the working of the institution, but it throws a burden of responsibility upon the small number who have already devoted much time and energy to the affairs of the hospital. Lay governors have their duties as much as members of the medical staff, and we cannot wonder that anyone who has the welfare of his hospital at heart, and who sees it languish from the apathy of those who ought to be most active in its maintenance should seize the opportunity to remedy the grievance. Mr. Parker, however, was not contented with this, and had the courage, we had almost said the temerity, to renew the charge of absenteeism when the subject of the re-election of the treasurer, Mr. E. S. Norris, M.P., came up. In this he did not receive the same measure of support, and it is to be regretted that Mr. Norris was not present himself. That gentleman has, however, thought it fitting to indite a letter to a local paper which for discourtesy is as marked a sample of its kind as may be met with. To speak of the "attack" being made upon him by "a certain Mr. Parker," whom he has "no hesitation in denominating as the 'firebrand' of our Committee," is, to say the least, uncalled for. The profession is well acquainted with Mr. Parker, who has built up a reputation from the results of his untiring devotion to his duties at this very hospital, and he can well afford to pass the matter over in silence. As regards Mr. Norris, we do not say that his office of treasurer should necessitate his constant attendance at the meetings of the Committee, and as he has been long attached to the hospital it might be ungracious to dispense with his services because his other public duties call him elsewhere. But it was quite within Mr. Parker's right, and that of any member of the governing body, to impugn a state of things which he conceived to be detrimental to the progress and welfare of the hospital. There must be in the management of the institution questions of finance constantly arising, in which the advice and opinion of the treasurer are requisite, and it passes our comprehension to see how any gentleman can hold an office of that kind without keeping himself personally acquainted with the working of the institution of which he is so prominent a member; and when, on his own showing, his time is so much occupied elsewhere and his interests so divided, how can this knowledge be sustained?

EPIDEMIC SUICIDE.

EPIDEMICS of suicide are happily very rare in this country. We are not as a people, though proverbially grumblers, particularly discontented with our lives. In nationalities distinguished by the enforcement of military service as part of the duty of citizenship, life is so irksome that suicides are common. We venture to think that the conditions of living have more to do with suicide than beliefs or fatalism. It would, however, be a mistake to confound the mere prevalence of suicide in a district or class with epidemic suicide properly so-called. It is possible that just as hysterical phenomena may extend by imitation from one person to another until the total number of individuals affected is very large, so the impulse to self-destruction may be propagated, although there is no sufficient cause for the prevalence of the act. This would be an epidemic of suicide. It would be interesting to ascertain whether genuine evidence in support of the hypothesis that self-slaughter is sometimes epidemic actually exists.

IS SEWER AIR NOXIOUS?

IF there is one thing more than another of which sanitarians have hitherto felt sure, it is that the air of sewers is dangerous and sometimes deadly to human life. The faint, sickly odour is familiar to all of us, and have not most of us had examples of disease which to all appearance was directly due to the escape of sewer air into houses? We recall one instance which may be taken as typical. In a large London house, admirably built, and supplied with New River water, typhoid made its appearance in the nursery floor at the top of the house, and one of the children died. On inspection it was found that the ventilating pipe of a closet passed into and not through the roof, that the syphon trap was apt to get dry, and that sewer air was actually passing into the room where the children slept. Probably the majority of our readers could record similar experiences. It is true that objections have been raised to the theory, of which the most formidable is the alleged fact that men who spend a large part of their waking hours in sewers do not seem to suffer from it. To this the current answers are that the men are presumably strong and healthy, and, what is far more important, they are not exposed to the influence at night, when vitality is lowest. But now we are confronted by new experiments, too important to be ignored, which raise more serious doubts. At the request of a Select Parliamentary Committee which in 1886 was appointed to inquire into the drainage of the House, Professor Carnelley and Dr. Haldane of University College, Dundee, have made careful experiments upon the air of sewers. Their results were communicated to the Royal Society at its meeting on June 16th last, and they are certainly surprising. Examining it by various methods, they were unable to discover that it was much worse than the atmosphere outside, and in some respects it compared favourably with the air of close rooms. Comparing the air of the sewer with the air outside it at the same time, they found that the sewer air contained about twice as much carbonic acid and about three times as much organic matter as the fresh air, but much fewer micro-organisms. In small and ill-ventilated houses they found more carbonic acid, more organic matter, and far more micro-organisms than in the sewer air they examined; so that if these experiments were to be taken as final and conclusive, the inhabitants of a small room would improve their sanitary position by living in the atmosphere of a sewer. But of course the experiments are not conclusive, and the authors have done wisely in founding no sanitary conclusions upon them. They will even be dangerous if they lead anyone to regard with indifference the presence of what we must continue to consider as an insidious enemy. In regard to organic matter and micro-organisms, it is the quality and not the quantity which is of importance. A small quantity of strychnine is more dangerous than a large quantity of sugar, a single rattlesnake than a cartload of blind-worms, and yet both chemicals may be described as "organic matter," and both reptiles as "moving organisms." Our knowledge is as yet quite insufficient to enable us to judge of the quality of the organic matter, living or dead, which is present in sewer air, and we have every reason to believe that it varies enormously. We have a great amount of evidence in support of the current belief, and shall not lightly discard it. But at the same time we are thankful for any experiments as carefully executed as these have been, for they are sure, sooner or later, to add to our real knowledge. Moreover, we must not forget that recent experience has brought into prominence one very active agent in the spread of disease which was long unsuspected—namely, milk. It is of course possible that some, at any rate, of the outbreaks which have been ascribed to sewer air may have been due to poison lurking in the milk-can, but it is at least improbable that all can have originated in this way. In the fearful explosion of cholera at Newcastle-on-Tyne exceptional mortality was observed among those who lived close to open sewers or worked over the gully-holes of drains.

DR. THIRIAR ON THE TREATMENT OF FRACTURES OF THE FEMUR.

DR. THIRIAR, in an instructive clinical lecture to the Brussels medical students on the treatment of fractures of the thigh, pointed out the advantages of the telescope apparatus proposed and described by Professor Derobaix some seven years ago. This consists firstly of a starch bandage reaching from above the knee to the foot, provided with a stirrup and a cord, which passes over a pulley, and has a weight attached to the end in order to keep up constant extension; and secondly, of a femoro-pelvic starch bandage, which is applied two or three days after the first bandage, the upper part of which it covers so that the one may slide within the other in telescope fashion. When dry, the femoral portion is slit up. It can thus be opened and the seat of the fracture inspected at pleasure, and if necessary manipulated by the hands, while an assistant makes any required degree of traction on the leg. Afterwards it can be tightened up by straps and buckles with which it is provided, and the limb is then absolutely protected against all lateral or see-saw movements, while the patient can be moved as much as is necessary for purposes of cleanliness without endangering the rigidity of the fractured limb. By this means Dr. Thiriar believes better results can be obtained than by any other apparatus; and he publishes a list of thirty cases, in all but two of which there was either no shortening or so little that it did not amount to a quarter of an inch. In one of the two unsuccessful cases the patient was excessively unruly, and in the other no amount of manipulation appeared to reduce the deformity when first seen.

COMPULSORY VACCINATION.

THE President of the Local Government Board was questioned in the House of Commons last week as to whether he was aware that a house-to-house inquiry in sixty-five towns of England had shown that a large majority of the householders were opposed to compulsory vaccination, and whether the answers of those canvassed report 428 cases of death and 1996 cases of injury as due to vaccination. Mr. Ritchie, in his reply, stated that he was aware that a number of questions had been circulated by the Anti-vaccination Society, but he did not know how many persons had declined to fill up the forms, and he did not attribute any particular value to the answers received. The worthlessness of an inquiry conducted in this manner is obvious, and Mr. Ritchie acted wisely in disregarding such statements. Everyone knows that it is the habit of ignorant people, whose minds are poisoned by the statements of anti-vaccinationists, to attribute to vaccination every ailment from which a child may suffer subsequent to the operation. Thus, but a few days ago, we had experience of an outbreak of chicken-pox in a household, the cause of which was accepted by the inmates to be the previous vaccination of a baby a few days before these illnesses occurred. A further question which was raised, as to the deaths of 271 children which were registered in England and Wales as due to cow-pox and other effects of vaccination, gave Mr. Ritchie the opportunity of explaining that the children vaccinated during the period in which the deaths took place amounted to 3,800,000, and that he was informed by the Registrar-General that almost invariably in these cases of death some secondary cause was mentioned, and by far the

most common of these secondary causes was erysipelas. Assuming for one moment that the certificates supplied to the Registrar-General correctly represented that vaccination and its effects caused death, it is comforting to know that erysipelas can be prevented by due care in the performance of the operation and in the subsequent management of the child. The recently issued instructions of the Local Government Board will assist in this direction, and every operator should caution parents as to the necessity for guarding their children against the risk of infection of erysipelas, either by exposure to other persons suffering from this disease, or by want of cleanliness. It is matter for speculation how many of the 3,800,000 children would have died from small-pox if they had remained unvaccinated—certainly many thousands, for small-pox used to spread over the country every four or five years and destroy a large proportion of children born since the preceding epidemic. This terrible loss of life has been prevented by vaccination, and it behoves every medical man to save an operation so potent for good from the discredit which is cast upon it so long as any deaths can be held to be due to its performance.

THE DETENTION IN WORKHOUSE HOSPITALS OF PAUPERS SUFFERING FROM SYPHILIS.

THE proverbial uncertainty of the law has recently been illustrated in a very striking manner. In 1867 the Act known as the Poor-law Amendment Act was passed (30 and 31 Vict., cap. 106), and among its other provisions were the very important powers conferred by Sec. 22:—"When there shall be in any workhouse a poor person suffering from mental disease or from bodily disease of an infectious or contagious character, and the medical officer of such workhouse shall upon examination report in writing that such person is not in a proper state to leave the workhouse without danger to himself or others, the guardians may direct the master to detain such person therein." In 1871, just four years later, the Royal Commissioners appointed to inquire into the Contagious Diseases Acts, 1866 and 1869, issued their report. Among the Commissioners were some experienced members of the Bar, including the chairman (the late Mr. Wm. Nathaniel Massey) and Mr. G. W. Hastings; the secretary, Mr. John Armstrong, was also a barrister-at-law. In the 53rd section of their report, page 16, the Act above quoted is thus alluded to:—"We are advised that the 30 and 31 Vict., c. 106, s. 22, which provides for the compulsory detention in workhouses of persons afflicted with contagious disease, includes syphilis, and we therefore recommend that, wherever there is a certified hospital within the union, any pauper afflicted with such contagious disease shall be removed to such hospital." Both the section of the Act and of the Commissioners' report appear plain enough, and although many persons held individual opinions that the Act referred only to such diseases as were indisputably infectious or contagious, such as scarlet fever, typhus, small-pox, &c., still the interpretation of the Act as just given was acted upon, and, until lately, no doubt existed as to the lawfulness of detaining paupers with syphilis. But the guardians of the Portsea Union having recently raised the question, a letter has been forwarded to them from the Local Government Board which effectually repeals this compulsory power, the law being thus defined:—"The Board direct me to state that in accordance with the promise which the President made to the deputation, a case has since been submitted to the law officers of the Crown for their opinion as to the powers of guardians under Section 22 of the 30 and 31 Vict., cap. 106, to detain in the workhouse persons suffering from syphilis. The law officers have given as their opinion that the provision in this section with reference to the detention in workhouses of persons suffering from bodily disease of an infectious or contagious character does not apply to persons in the workhouse suffering from syphilis in a contagious form, whether or not they are known prostitutes. According, therefore, to this opinion, guardians have no power under the statute before mentioned to direct the detention in the workhouse of the persons referred to." The effect, of course, will be that prostitutes will leave the workhouse uncured whenever they may feel disposed to do so. There would appear to be some sort of fatality at present in the various circumstances which are all conducing to the spread of syphilis. The closing of all the Government Lock Hospitals, the proposal to close the Westmoreland Lock Hospital of Dublin, the temporary closing of the Liverpool Lock Hospital, and now the abrogation of the compulsory powers recently enforced in workhouses,—all these tend to one result, for which it is to be hoped the public will be fully prepared—viz., the appearance of syphilis in an almost epidemic form. The medical profession have given warnings again and again, which have, however, passed unheeded. Probably some sensational article will sooner or later appear in some daily London paper similar to that which appeared seventeen years ago respecting the "Wrens of the Curragh," and with a similar startling effect. Or possibly some peer of the realm may deem the subject worthy of notice, and may call attention to the subject. Might it be possible this session to pass a short Act conferring the requisite power upon all boards of guardians?

HAY FEVER.

A PAPER on the subject of hay fever was read by Dr. John Roe at the recent ninth annual session of the American Laryngological Association (*Boston Medical and Surgical Journal*, June 9th). It was based on a study of forty-two cases—twenty-six males and sixteen females,—and of this number thirty-five had been practically cured. The plan of treatment was to cauterise the sensitive areas of the nasal passages, which in all cases were found diseased. It was pointed out that the condition of the larynx, pharynx, and bronchi must not be overlooked, and that not infrequently enlarged tonsils will keep up irritation in the turbinated bones. Thirty-one of the patients suffered from asthma. The conclusions arrived at were as follows:—1. All cases of hay fever have the initiative lesion in a diseased condition of the tissues of the nasal fossa. 2. All diseases of these tissues induce in the ganglionic centres connected with them an abnormal activity, which is reflected to other organs. 3. The sensitive areas in the nose are not found in any particular portion of the cavity, nor are there any zones which when irritated produce always the same manifestations. 4. The direction in which the irritation is reflected is always in the line of least resistance. Irritation in the same region may be reflected in one direction at one time and in another direction at another time. 5. The disease in the nose may produce disease in other portions of the respiratory tract, which may become independent centres of irritation. 6. The affection recognised as hay fever is due to local irritations brought in contact with the sensitive areas in the nose. 7. The affection is not *per se* neurotic, nor is the so-called neurotic condition of the person necessary to render him susceptible to local irritation applied to the air-passages. It is not necessarily associated with the nervous temperament. 8. The neurotic condition, which is often regarded as the cause of the hay fever, is often the result of the local irritation. 9. By careful and thorough treatment of the disease of the nasal tissue, combined with that of other portions of the respiratory passages below, which have become secondary sources of irritation, we need not fail to cure hay fever. In the

discussion on the paper Dr. Sajous observed that he had often produced temporary benefit by the cautery, but attributed that to the fact that the cauterisation was too superficial. Since he had deeply cauterised he had cured the disease. Dr. Mackenzie of Baltimore did not think there was disease of the nose in hay fever, which he regarded as a neurosis, not to be cured by local treatment. Drs. Hooper and Solis Cohen agreed in the main with Dr. Mackenzie's view, the latter pointing out that the patients, besides being neurotic, were also often overworked, and had resorted to stimulants.

THE COMMITTEE ON THE ARMY AND NAVY ESTIMATES.

IN the examination of Mr. Knox, the Accountant-General to the War Office, before the Committee of the House of Commons, so far as we can learn from the imperfect newspaper reports, Colonel Nolan put a number of questions relative to the expense of the medical service, apparently with a view to get from Mr. Knox an opinion that the present system is expensive, and that the work might be done more cheaply. But the Accountant-General, while admitting the fact of the heavy expense, gave a very decided opinion that it could not be got rid of. The means of reduction at which Colonel Nolan pointed were the withdrawal of the right to retire after twenty years' service, and also an increase of pay after that period to induce officers to remain. But Mr. Knox, while admitting that this would be cheaper, did not believe it could be carried into practice. "The officers would not take it.....The medical profession desired the arrangement, and as the medical officers might not have been obtained, it was necessary to pay the price for the article." If the gallant Colonel will take the trouble to refer to the past history of the Medical Department, he may learn that the conditions of service to which he proposes to revert were those under which it came to a dead lock from want of candidates. No one who takes an interest in our soldiers would desire ever again to see the Medical Department brought to the deplorable condition from which it was raised by the reforms introduced by Lord Herbert, or even to that of a still later period (1878), when it was in so unsatisfactory a state that the Secretary of State for War deemed it necessary to suspend the usual advertisements for candidates, and to appoint a committee to inquire into the causes of discontent and report what measures were necessary to render the service once more popular (vide THE LANCET, Feb. 15th, 1879). But it may not be amiss to point out that, from the improved condition of the medical service, there has been a marked reduction in the sickness and mortality of the troops, which, totally apart from considerations of duty or humanity towards the soldier, implies a reduction of expenditure in replacing those who die and are invalided, and in the number of recruits required for that purpose. The latter, of itself, is a matter of importance at a period when it is necessary to raise upwards of 40,000 men annually to keep up the effective strength of the army That the medical service might be performed more cheaply as regards money expenditure we admit, but it would be at a serious cost to the country in the way of increased sickness and mortality and decreased efficiency. The experience of the late Egyptian campaign shows the position of the responsible head of the Army Medical Service to be one of great difficulty. The public cannot have forgotten the fierce attacks by the newspapers on the Department, because it had not provided trestle beds, whisks, mosquito curtains, cooking apparatus, medicines, and all sorts of medical comforts for an army disembarking at an unknown port, fighting a battle in the desert, and "rushing" the capital within a period of about three weeks. And now the financial reformers attack it on the score of the great expense involved in providing even the moderate, but necessary, supplies which were so decried. Surely our troops, called upon, as they are, to serve in all climates and often under circumstances very prejudicial to health, are entitled to thoroughly good and efficient medical and surgical aid, and this must be paid for. What appears to us to call for thorough investigation is the long list of general officers, the great expense of the military staff, and the state of the non-effective list of the combatant branches of the service. The commissariat, the transport, the military staff, and the very headquarters at the War Office, with its cumbrous staff of highly paid clerks, might all afford abundant materials for a judicious reduction of expenditure.

NASAL VERTIGO.

THE thesis might be maintained that irritation of any sensory area may give rise to vertigo; but the difficulty of proving to demonstration that such a proposition holds good would be very great. Hitherto the occurrence of vertigo as the result of a lesion in the nasal passages has not been generally accepted, and we doubt whether there can be any very special or causal connexion between a vertigo and a nasal lesion. In a few cases a connexion may be traced, but it is very possible that the nervous phenomenon, vertigo, is chiefly caused by the nerve weakness, the nasal lesion playing perhaps only the part of the "last straw." Dr. Joal, the latest writer on nasal vertigo, believing in its positive existence, asserts that the vertigo is a genuine reflex; that it ought to be ranged side by side with gastric, laryngeal, uterine (*sic*) forms; and that irritation of the branches of the trigeminal supplying the mucous membrane of the walls and septum of the nose is its cause. He thinks that the mechanism is one of cerebral anæmia brought about by the transmission of the irritation through the spheno-palatine ganglion to the vaso-motor nerves. The vertigo is especially induced by slight nasal affections such as result from inhalation of irritating vapours, snuff, &c. Acute coryza, hypertrophic chronic catarrh, mucous polypi, and catarrh of the retro-pharynx are other causes. These reflex effects are most marked in arthritic subjects. The vertigo may be the only symptom, or it may be accompanied by visual troubles, hemicrania, nauses, vomiting, great excitement, hypochondria, intellectual weakness, &c. The statement is also made that the vertigo ceases with the cure of the nasal affection which has caused it.

ELECTRIC LIGHTING ON RAILWAYS.

THERE are certain blunders of omission or commission in policy which appear inexplicable. One of these is the omission to light railway carriages by electricity, and another the recourse to gas and other highly dangerous appliances of illumination. The peril of travelling reservoirs of gas has been painfully illustrated of late. It is strange that any company has had, and still has, the hardihood to subject its passengers to the very grave peril which besets the use of gas in this way. More wonderful still is the neglect to use the motor force available for the self-generation and storing of electricity. Surely there would be no great difficulty in so adapting the necessary apparatus as to make the moving wheels of the carriage do the work of an engine. It is needless to emphasise this suggestion. There is, of course, nothing new in the idea, but it seems to be one of those very obvious matters which are seemingly too plain to be perceived, or in some way fail to impress that particular part of the mental constitution which we call the common-sense instinct. The task of providing trains which travel at night with special accumulators cannot be overwhelming. Those trains that travel by day, and only require lights for tunnels could, we imagine, be utilised to charge the accumulators required by night trains.

DEATH BY ELECTRICITY.

M. D'ARSONVAL has been conducting some experiments for the purpose of preventing fatal accidents from the use of electricity. He has come to the conclusion that electrical currents are not dangerous until a power of 500 volts is reached, and he has devised an ingenious plan by which the extra current which occurs at the moment the current is broken, and which is the chief source of danger, may be annulled or neutralised. A V-shaped tube, made of an insulating material, is filled with mercury and is interposed in the main current. In order to close the main current a tap is turned and the machine is unprimed without giving an extra current spark. Or a glass tube is filled with mercury and dipped into a reservoir containing mercury. This tube is provided with a ground stopper, which not only suppresses the extra current, but interposes any resistance in the current. The invention seems to be original and ingenious, but unless considerable care be taken, even with its assistance, danger is still imminent. Another observation made by D'Arsonval is that extra currents from the dynamic electricity and alternating currents do not produce serious organic disruption of the living tissues like discharges of statical electricity. This, however, is not a new observation. The special disruptive and fatal effect of the statical discharge has long been known in this country, and was most fully brought out in Dr. Richardson's experiments on death by electric shock conducted in the Royal Polytechnic Institution in 1869. In those researches sheep and other animals were killed by the statical discharge, and the cause of death was shown to be due to the sudden expansion of gaseous parts of the blood and tissues, by which organic lesions of the most extensive kind were induced. In one of this series of experiments the skull of a dead animal was fractured by the statical discharge, and arborescent markings of external veins, distortion of large veins, rupture of the heart, ecchymosis, rupture of the stomach, and decomposition of the blood itself, from the same kind of discharge, were phenomena traced to disruption from gaseous expansion. At the same time the statical discharge does not always kill. It may simply stun, or cause a temporary anæsthesia, or produce a state resembling catalepsy, followed by recovery.

COAL MINES REGULATION.

THE recent debate in the House of Commons on the Coal Mines Regulation Bill, if it has not effected any great changes in the system of colliery management at present existing, has not, at any rate, been wholly fruitless of benefit to the employed. The amendment which provides that boys shall no longer be employed underground at an earlier age than twelve years marks a distinct improvement on the former arrangement, which fixed the limit at ten. Health and education will equally gain by the new restriction, and it cannot be urged with any real force that the boys will lose anything in point of technical experience by being kept out of the mines at an age when their mental and bodily powers have hardly begun to develop. The working time (fifty-four hours per week) is still, for such young boys, longer than we could wish, but serious difficulties at present prevent its reduction. As regards girls, who begin their duties at the pit's mouth at the same age as the boys, it has been proposed to fix the earliest limit at fourteen years. Certainly at that age and afterwards they would be fitter for their duties than before it; but as their work is less arduous than that of the boys, and no complaint is made on their account, it would seem that the uniform regulation referred to imposes no hardship upon them. Measures relating to the prevention of accidents were discussed at considerable length, and important suggestions were made respecting the disuse of gunpowder in blasting operations, and the education of miners in the art of "timbering," or supporting the walls and roofs of passages, in order to prevent falls of coal, to which many fatal accidents are due. Technical education is coming to be recognised as one of the crying wants of our time, and the suggestions we have referred to, and the facts upon which they are based, are enough to show that the miner is one of those who stand greatly in need of its advantages.

CONVERSAZIONE AT THE ROYAL COLLEGE OF PHYSICIANS.

ON the 29th ult. a conversazione was held at the Royal College of Physicians, the gathering, representative of every branch of the medical and surgical professions, being a large one. The guests were received by Sir William Jenner, Bart., K.C.B., the president; Dr. Habershon, the vice-president; Sir Dyce Duckworth, the treasurer; Sir Henry Pitman, the registrar; and the censors, Dr. Handfield Jones, Dr. Dickinson, Dr. Bristowe, and Dr. Andrew. The staircases and various apartments were tastefully decorated with flowers and palms, and the band of the Coldstream Guards was in attendance. Some interesting scientific preparations were on exhibition during the evening: notably a collection of bacterial cultivations and microscopic specimens by Mr. Edgar Crookshank; a new form of sphygmograph, invented by Professor Ludwig, by Dr. Lauder Brunton; and a diffraction spectroscope with concave grating of six-feet focus, ruled by Professor Rowland, by Dr. W. H. Stone. There were also a number of paintings and other works of art exhibited.

DRUGS, APOTHECARIES, PHYSICIANS, AND ROYAL PATIENTS.

WHILE ready to recognise that Sir William Gull in his recent deliverance on the independence of physicians and their Royal patients of drugs and apothecaries must not be taken too literally, we cannot forbear giving our readers the following delightful quotation from Mr. John Evelyn, to show how the lives that make history are affected and even saved by suitable medicines, in the introduction of which good apothecaries may have a creditable share:—

"1694.—29th Nov. I visited the Marquiss of Normanby . . . . . and had much discourse concerning the *Quinquina* which the Physicians would not give to the King, at a time when in a dangerous ague it was the only thing that could cure him (out of envy because it had been brought into vogue by Mr. Tudor an apothecary), till Dr. Short, to whom the King sent to know his opinion of it privately, he being reputed a Papist (but who was in truth a very honest good Christian), sent word to the King that it was the only thing which could save his life, and then the King injoined his physicians to give it to him, which they did, and he recover'd. Being asked by this Lord why they would not prescribe it, Dr. Lower said it would spoil their practice, or some such expression, and at last confessed it was a remedy fit only for Kings."

DISCOVERY OF DIAMIDE.

A VERY interesting discovery has just come to us from Germany. The author, Theodor Curtius, investigating diazo-acetate of ethyl, found that by the action of potash a yellow crystalline compound was obtained, which in its turn was changed by sulphuric acid into white crystals, which proved to be the sulphate of the long-sought base diamide N_2H_4. The important compounds called amides and amines contain, as is well known, the radical NH_2, formerly known as amidogen, which is the true analogue of hydroxyl, OH, and cyanogen, CN. This radical has at last been isolated, but, as in the case of the other normal radicals, the formula must

be doubled, and the free compound is N_2H_4 or $NH_2.NH_2$. The base is easily obtained from its sulphate by the action of alkalies, and is a very interesting substance, about which we shall soon know more. It is a gas soluble in water and fuming with hydrochloric acid. Its solution is a base, and turns red litmus to blue, and yet it is in smell and in other respects different from ammonia. It is a powerful reducing agent, readily reducing Fehling's solution and nitrate of silver. Its salts are suddenly decomposed by heat, and yield nitrogen when treated with nitrous acid, which last reaction shows their true amidic nature. The further study of this most interesting substance will be awaited eagerly by all chemists.

JUBILEE ADDRESSES TO HER MAJESTY.

AT a Court held at Windsor Castle on the 27th ult., addresses were received by Her Majesty from deputations from the following, amongst other societies and corporations:—Royal College of Physicians of London (Sir William Jenner, President, and Sir Henry Pitman, Registrar); Royal College of Physicians of Edinburgh (Dr. George Balfour, Vice-President, and Mr. R. P. Ritchie, Treasurer); King and Queen's College of Physicians in Ireland (Dr. James Little, President, and Dr. J. W. Moore, Registrar); Royal College of Surgeons of Edinburgh (Dr. Argyll-Robertson, President, Surgeon-Oculist to the Queen in Scotland, and Dr. John Smith, Vice-President); Royal College of Surgeons in Ireland (Dr. Anthony Corley, President, and Mr. Henry Fitz Gibbon, Vice-President); and the British Medical Association (Dr. W. Withers Moore, President, and Sir Walter Foster, M.P., President of the Council). In the above list, it will be observed, the Royal College of Surgeons of England is not included. This may be accounted for by the fact that the address of the College was presented through the usual channel of the Home Secretary, the authorities being unaware that they might have had the same personal presentation to Her Majesty as the other corporations.

PROFESSOR HASSE ON UNIVERSITY REFORM.

IN a recently published paper on Desirable Reforms in German Universities, Professor Hasse of Breslau proposes that all professorial chairs should be vacated as the occupants reach the age of sixty-five; that the salary should, however, continue to be paid with little or no reduction; the ex-professor to be at liberty to give lectures still, but to be deprived of his seat and vote in the Faculty, and to be ineligible for any examinerships. Amongst other reforms desired by the Breslau Professor of Anatomy is a regulation preventing students from taking their Doctor's degrees before they have passed the State examination, as he knows instances in which men with such a *quasi* qualification have engaged in practice.

BOAT OWNERS AND BOATING ACCIDENTS.

A FEW days ago a young man while rowing on the Thames accidentally lost his life by drowning. He was evidently quite unable to row, and the unfortunate occurrence appears to have been directly due to his want of skill in this particular. While proceeding up the river in an outrigged boat against the tide, he suddenly stopped rowing with one hand, and he was thrown into the water. At the coroner's inquest upon this case several of the jury expressed their disapproval of the conduct of boat proprietors in letting out their craft without inquiry to inexperienced persons. We certainly agree with those members of the jury, that it is most unadvisable for anyone ignorant of the management of boats to make an essay in rowing under the conditions which proved so fatally unsuitable in this case, and also that it would be well for boat owners to ascertain, if possible, whether those who hire their boats can be trusted to navigate them. At the same time, the chief responsibility for an accident of this kind must rest with the too venturesome rower, and it would therefore be too much to expect that a proprietor should be bound by law to inquire into the boating qualifications of the public who resort to him. His duty is to provide a good boat, with any special information as to its management which may be called for, but the occupant alone can be held accountable for his temerity in using it when he should not.

THE MIDDLESEX HOSPITAL.

THIS hospital was closed on the 1st inst., and will remain closed for about two months, in order to allow of its being thoroughly repaired and the kitchen and laundry departments reconstructed. Surgical out-patients will, however, continue to be seen by the assistant-surgeons until the 15th inst., whilst the cancer wards and the midwifery department will still remain open. In connexion with the cancer department, it may be noted that a ward has now been entirely set apart for male cancer patients, with a day-room adjacent to it, the cost of such alteration being defrayed by a sum of money placed in the hands of Dr. Greenhow, consulting physician to the hospital, for this purpose. The new buildings in connexion with the hospital and medical school are also progressing actively, the nursing institution being nearly completed, and the new and handsome residential college for students being almost as far advanced. Mr. Leopold Hudson has been appointed warden of the college, which will be quite ready for occupation by the opening of the winter session.

AUSTRIAN HEALTH RESORTS.

The Times of June 22nd began publishing a series of articles "from a correspondent" on Austrian health resorts, which cannot fail to be of much interest to many who are contemplating an autumnal holiday to some continental inland watering-place. The gouty, the rheumatic, the dyspeptic, and the overwrought find in such a change relief and invigoration, which strictly medicinal treatment at home often fails to accomplish. It is not sufficient for such persons that their change should have a directly medical object, and be confined to drinking this or that natural mineral water, though this may form a very important element for the relief of their discomfort. But the air, scenery, elevation above sea level, as well as amusements and novel experiences of life, with facilities of travelling, are matters needing careful preliminary consideration, both by the doctor and the patient. The medical adviser has much difficulty in selecting the kind of place that is likely to be beneficial as well as agreeable to his patient. A large number of persons who go to continental watering-places need the one as much as the other. Numbers of persons can be equally well treated medicinally at any one of three or four places, though in some instances, no doubt, a particular place is best suited to a particular case; and this is a matter which medical opinion can best settle. But in other instances, where the appurtenances of medicinal treatment have to be considered, the patient may fairly have a voice in the selection, and he could scarcely do better than read the articles referred to in order to fit himself to exercise a right judgment in this respect; nor are the articles without their value to medical men. At the same time, it is important for the English public to bear in mind that there are in the British Isles health resorts that afford all the advantages enjoyed by continental spas, without the disadvantages, chiefly of an insanitary kind, which characterise very many of them.

THE VETERINARY PROFESSION.

IN another column we publish a letter from a well-known veterinary surgeon (Mr. James Lambert), who has misinterpreted an annotation we published in our issue of last week on the veterinary and medical professions. Our annotation was written in opposition to certain statements reflecting on veterinarians. We can but refer him to the article itself, and we think that no useful object would be served in discussing the statements that he has made. But we must protest against his conclusion that the medical profession is not desirous of working with the veterinary in the study of disease; the intimate relation which exists between human and animal affections is, apart from other reasons, sufficient ground for a close alliance, and we observe with satisfaction that the Agricultural Department have called to their aid a medical pathologist. We have already expressed our opinion that a skilled veterinarian should be attached to the Medical Department of the Local Government Board, for it is by such co-operation that the best results will be obtained.

MEMORIAL PORTRAIT OF SIR WILLIAM JENNER, BART., K.C.B., M.D.

THE Executive Committee wish it to be known that the list will not remain open much longer. Intending subscribers are therefore requested to send their contributions to one of the treasurers (Dr. Charles J. Hare and G. D. Pollock, Esq.) without delay. A list of the subscribers, but not the sums contributed, will be published.

BOULTER'S LOCK.

SURELY it is time that a more serious attempt was made by the Thames Conservancy to prevent a scene such as that witnessed so often at Boulter's Lock on Sunday evenings. It is a disgrace to the river, as those who have been present can testify. Above the lock are crowded scores of boats, the occupants of which are anxious to get through, possibly in order to catch a train at Maidenhead. There is no order, each tries to get in when the doors are opened, and tries with might and main to get first, whilst those behind hang on those in front and completely stop progress. Steam launches push forward, and the planks of the smaller boats give way; the excited and angry owners shout and use strong language, ladies scream as they hear and see the sides of their boat stayed in, and occasionally a man is thrown into the water. The lock-keeper does what he can, but that is little. The confusion is rendered worse by the shouts, jeers, and laughter of the crowd on the banks and sides of the lock. Hours are spent in this almost hopeless struggle, and we fear that before long, unless some remedy is found, there will be loss of life, as well as destruction of property. Are we to wait for the verdict of a coroner's court on some helpless pleasure-seeker before an attempt is made to prevent what must be regarded as little less than a scandal?

WHITECHAPEL DISTRICT.

THE District Board and the Board of Guardians of Whitechapel have memorialised the Metropolitan Board of Works to proceed without delay in dealing with the Bell-lane area, the conditions of which they regarded as a physical and moral danger and a great scandal to the whole metropolis, their spokesman, the Rev. Mr. Billing, stating that they were quite ready to suffer any loss which might be entailed by the removal of the houses and the consequent temporary loss of rates. The memorial was referred to a committee, and it may be hoped that the much-needed improvement will not long be delayed. The cost of the proceedings, which are taken under the Artisans and Labourers' Dwellings Improvement Acts, fall upon a general metropolitan rate, and the well-to-do districts of London bear their burden of the expense. There is a general desire that the present year should be marked by the social advancement of the people, and it is to be hoped that the Metropolitan Board will not hesitate to exercise the large powers that they possess for this purpose.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Karl Damian Ritter von Schroff, formerly Professor of Pharmacology and Pharmacognosis in Vienna, at the age of eighty-four, at Gratz, the residence of his son Dr. Karl Ritter von Schroff, who is Professor of Materia Medica in that University. The deceased *savant* was the founder of scientific methods of studying and teaching pharmacology in Vienna, where he established the Pharmacological Institute, in which building so many important and valuable researches on drugs and on their action on the animal economy have been carried out by himself and his pupils. He held his professorship for twenty-four years, till, indeed, he was seventy years of age, since which time he had been living in Gratz with his son.—Dr. Joh. Pasternazki, *docent* of Mental Diseases and physician in charge of the department for Mental Diseases in the Ujasdowsches Military Hospital in Warsaw.

HOLYHEAD SANITARY ADMINISTRATION.

THE question asked in Parliament as to the sanitary condition of the Holyhead Rural Sanitary district, and as to the appointments of the officer of health and the inspector of nuisances, indicates that inefficiency on the part of the authority has been discovered, and, in all probability, this inefficiency is most marked in respect to the position which the authority have assigned to their officers. Why the report has not been published we cannot say; but we do know that Mr. Harvey, the reporter, is an expert in sanitary work, that he is a painstaking official, and that any advice he has given is likely to be sound. As regards the medical officer of health, we note, from the published list, that he holds office for Holyhead rural, Holyhead urban, Anglesey rural, and Beaumaris urban districts at a salary which can only have been assigned on the understanding that he was not expected to do much. Perhaps the refusal of the central authority to sanction the appointment of the inspector of nuisances is based on similar considerations of fee. If so, we hope the authority for this widely scattered district will not get their own way by bringing an imaginary grievance before Parliament.

VACATION CLASSES AT VIENNA AND BERLIN.

THE programme of medical courses of instruction at Vienna during the months of August and September has been issued. The number of such classes is now very large, and of their convenience for foreigners there can be no question. Most of them are complete within a month, meetings being held daily. Amongst them may be noted those on morbid anatomy (Dr. Adolf Zemann); pathological histology (Dr. Kolisko); bacteriology (Prof. Weichselbaum and Prof. von Frisch); medical diagnosis (Drs. von Frisch and E. Neusser, Drs. Bamberger and Lorenz, Drs. von Langer and Heitler, and Dr. Drozda); diseases of the organs of circulation (Dr. Bettelheim); diagnosis of brain and spinal cord diseases (Dr. Benedikt); and the pathology and treatment of nervous diseases (Prof. Rosenthal). There are also courses on forensic medicine, urinology, practical and operative surgery, ophthalmology (no fewer than seven different

courses), gynæcology, laryngoscopy, otology, dermatology (Prof. Kaposi and Dr. Riehl), syphilis, &c. An even more complete series of post-graduate classes of a like kind will be held in Berlin, from the 26th of September to the end of October, of which the announcement will be found in the *Berliner Kliniker Wochenschrift* for June 27th, p. 483.

A MUNIFICENT GIFT: THE PROVIDENT DISPENSARY MOVEMENT.

AT the annual meeting of the Metropolitan Provident Medical Association, Sir Julian Goldsmid, M.P., presiding, it was reported that no new branches had been opened, but that the old ones had been successfully maintained. About half of the branches are self-supporting. The payments to medical men had amounted in 1886 to £1500, and for drugs to over £400. It is not said amongst how many medical men the £1500 were divided. The sum contributed by the members was £3000; that contributed by the committee to meet deficiencies was £214, or 7 per cent. It has been determined to recommend to local committees to make a charge of 1*d.* for the dispensing of every prescription. Mr. Bousfield announced that a Jewish gentleman, not resident in England, had given to the Association a donation of £3000 towards the establishment of provident dispensaries in memory of his son. We believe that the liberal gentleman in question is Baron Hirsch of Vienna, whose example is worthy of imitation.

THE REPEATED SERVICE IN WESTMINSTER.

WHATEVER criticisms may be made on the general features of the Jubilee celebration—and there is room for some,—it is very gratifying to notice that a sum not far short of £2500 was received from the Wednesday service, and very quickly divided amongst the medical charities of London—a third going to the Hospital Sunday Fund, a third to the Westminster Hospital, and a third to the Western Dispensary and the Hospital Saturday Fund jointly. Dean Bradley, in his letter to *The Times*, thanks all who have co-operated in the "service." We would add our thanks to the Dean himself for his share in such a use of the Abbey as has contributed a splendid contribution to a cause as meritorious as it is needy.

AN HONOUR DECLINED.

IT is indicated in the *Glasgow Herald* that Professor Gairdner has been offered, but has very courteously declined the honour of knighthood. We make no secret of our deep dissatisfaction, extensively shared by the profession, with the dispensation of Jubilee honours. Apart from the reasonable expectations of our own profession, the dispensation is exceedingly disappointing and unworthy of the occasion. We are glad, however, that Professor Gairdner has not been forgotten, for in him there meets all that is high in Scotch medicine.

SCARLET FEVER CONVALESCENTS.

THE annual meeting of Miss Mary Wardell's Convalescent Home for those recovering from scarlet fever was held a few days ago, under the presidency of Sir Risdon Bennett. During the past year 158 patients have made use of the Home, including children of all classes of the community. Admission is by payment, the terms for ordinary patients, adults, being 15*s.* a week; for children, 10*s.* The Home is delightfully situated on the top of Brockley Hill, near Stanmore, and supplies a real want in cases to which all ordinary accommodation is denied. In an age of great practical philanthropy there are few pieces of work more practically kind than Miss Wardell's. There is still a debt on the building of £500, and £2000 is wanted to supply certain necessary offices and apparatus for domestic purposes.

THE CROWN PRINCE OF GERMANY.

DR. MORELL MACKENZIE removed another portion of the growth in the larynx of His Imperial Highness on Wednesday last, and we are glad to know that he is satisfied with the progress of the case. The portion removed has been forwarded to Professor Virchow for examination.

INTERMEDIATE M.B. EXAMINATION.

THE Medical Faculty of King's College at their last meeting resolved to send a letter to the Senate of the University of London, pointing out the grave inconveniences which have been caused to lecturers engaged in summer courses by changing the date for the commencement of this examination from the fourth to the second Monday in July.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Hertwig of Jena, has been nominated for the second Professorship of Anatomy.

Cracow.—Professor Adamkiewicz has been given the charge of the newly-established Institute for Experimental Pathology.

Naples.—Professor Vincentis, of Palermo, has been appointed Professor of Ophthalmology.

WE have to record the death, in his eighty-sixth year, of the Hon. Grant Ellcock Thomas, M.D., late, and for upwards of twenty years, President of Her Majesty's Council in the Island of Barbadoes, which took place at his residence in Barbadoes on the 10th ult. Not only in the island, where he had long been resident, but throughout the West Indies generally, no one was better known or more universally respected than Dr. Thomas. Upon his retiring from the office of President of the Council some ten years ago, he was offered a knighthood, an honour which, while gratefully appreciating the intention, he respectfully asked to be allowed to forego, mainly owing to his advanced years.

AT a conference of the Glasgow Medical Charities' Committee with the Medical Committee of the Charity Organisation Society on the 23rd ult., it was, after some discussion, resolved to hold a conference with the members of the boards of management of the medical charities of the city and of the parochial boards, for the purpose of discussing any points connected with the abuse of medical charity which may require elucidation, and for appointing a final and representative committee to take the most advisable steps in the way of instituting a definite and practicable system of restricting gratuitous aid to the needy and deserving poor.

HOFRATH DR. HOFFMANN having retired from the post of Director of the General Hospital, Vienna, Professor Böhm has been appointed to this most important office, the said hospital being, we believe, the largest hospital in the world.

THE editorship of the *Fortschritte der Medicin*, vacant by the death of Professor Carl Friedländer, who himself established this important and valuable journal, has been taken over by Professors Carl Weigert and Heinrich Unverricht.

PROFESSOR HUMPHRY has been appointed delegate from the University of Cambridge to attend the International Congress of Hygiene, to be held at Vienna in September.

DR. W. B. HADDEN has been elected assistant-physician to the Hospital for Sick Children, Great Ormond-street.

PROFESSOR BILLROTH'S strength has been sufficiently restored to enable him to remove to his country house, St. Gilgen.

DR. JULIUS MICKLE has been nominated to deliver the Gulstonian Lectures at the Royal College of Physicians next year, and Dr. Dickinson the Lumleian Lectures.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the Royal College of Physicians was held on June 27th, the President, Sir W. Jenner, Bart., in the chair.

The President announced that the Registrar and himself had attended at Windsor that afternoon by command for the purpose of presenting to Her Majesty the Queen the address of congratulation lately drawn up by the College.

Dr. Robert Saundby was admitted to the Fellowship of the College.

A report was received from the Committee of Delegates on the appropriation of the vacant ground on the Embankment, and after considerable discussion, mainly in reference to the size of the proposed lecture theatre, the report was adopted after amendment by the omission of paragraphs relating to that subject. The gist of the amended report will be found in the abstract of the proceedings of the Royal College of Surgeons, which appears in another column.

The College next proceeded to consider the report of the Committee of Delegates appointed by the two Colleges to consider the desirability and practicability of granting degrees in medicine and surgery to persons who have passed the conjoint examinations of the two Colleges. The subjects dealt with by the committee were:—1. The communication from the Councils of King's College and University College, London, inviting the two Royal Colleges to confer with committees of those Councils in order to combine, if possible, the objects of all four Colleges, and to make a united application to the Crown for power to grant degrees in arts, science, and medicine. 2. The mode in which application should be made to the Crown by the Royal College of Physicians of London and the Royal College of Surgeons of England for power to confer degrees in medicine and surgery. With respect to the first subject, the committee recommended, and the resolution was adopted by the College by a large majority, "That it is desirable that the two Colleges proceed, conjointly and independently of other bodies, with their endeavour to obtain the right to confer degrees in medicine and surgery, and that therefore it is at present inexpedient to hold a conference with the University and King's Colleges for the purpose of procuring further powers to grant degrees in arts and sciences." The second question embraced the text of a draft petition to the Crown for a Charter and power to grant degrees, and also a draft Charter constituting twenty-four Fellows of the College of Physicians, together with twenty-four members of Council of the College of Surgeons, a corporate body, to be entitled the Senate of Physicians and Surgeons, which "shall have power to confer on any person who, by passing the examinations formerly held by both of the said two Colleges separately, or by passing the examination held by the examining board of the said two Colleges, or by passing any other examinations to be held by the two Colleges jointly or separately, has already acquired, or may hereafter acquire, the qualifications for registration under the Medical Act, and who shall have also complied with any further regulations (if any) or undergone such further examination (if any) as the Senate may from time to time see fit to impose or require as a qualification for a degree, both or such one as the Senate may think proper of the following degrees—namely, the degree of Bachelor of Medicine and Bachelor in Surgery, and the degree of Doctor of Medicine." This portion of the report was also adopted, and referred back to the delegates to carry into effect.

A report was received from the Leprosy Committee in the form of a reply to a memorandum from the Colonial Office, in which the opinion of the College of Physicians was sought as to the contagiousness of leprosy and the advisability of segregating lepers. The report advised the formation of proper leper asylums for humane treatment of the victims of this disease, and considered this a proper matter for State interference; but as no definite opinion was expressed in the report upon the question whether the College adhered to the statement of its committee of 1867, to the effect that the disease was not contagious, it was, after much discussion, referred back to the committee, with an instruction to embody in it a suggestion to Government to undertake anew the investigation of the disease, in order, if possible, to determine this question.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an extraordinary meeting of the Council of the Royal College of Surgeons held on Monday, June 27th, the Minutes of the Ordinary Council of the 9th inst. were read and confirmed.

A letter was read from the Secretary of State for the Home Department reporting the presentation to the Queen of the address of congratulation from the Council to Her Majesty on the completion of the fiftieth year of her reign.

The third report of the Committee on the Extension of the College Premises, which was approved and adopted at the previous meeting, was confirmed. It contained the following recommendations:—1. That the library be enlarged by pulling down the house No. 39, Lincoln's-inn-fields, at present occupied as a residence by the conservator, and that the space thus gained be added to the library, in the manner suggested by the architect, at an approximate cost of £2500. 2. That the house No. 38, Lincoln's-inn-fields, now occupied as chambers on annual tenancies, which is in a most unsatisfactory condition, be also pulled down and be converted into a residence for the conservator. 3. That a pathological curator, the whole of whose time shall be at the disposal of the College, and who shall not be in practice, be appointed, at a salary of £500 a year; and that such assistance, involving a probable additional expenditure of £300 per annum, be employed in the pathological department of the Museum, as the Museum Committee may from time to time recommend to the Council.

A fourth report from the same committee was approved, adopted, and entered on the Minutes. In this report it was decided to advertise the office of pathological curator, with a view to filling up the post in November; the Museum Committee to frame the rules governing the duties of the office.

Mr. W. Morrant Baker was elected a member of the Court of Examiners in Surgery to fill the vacancy caused by the resignation of Mr. Lund.

On the motion of Mr. Heath, seconded by Mr. T. Smith, and carried, it was agreed that, for the present, this Council do not spend more than £50,000 of the Erasmus Wilson bequest.

The report of the Colleges' Land Committee, consisting of delegates of the two Colleges, on the question as to the desirability of utilising the vacant ground adjoining the Examination Hall for "scientific purposes," under the control and management of the two Colleges, and that the "scientific purposes" be in the first place the investigation and exposition of such branches of science connected with medicine and surgery as the two Colleges may from time to time determine, was approved, adopted and entered on the Minutes. It was briefly as follows:—1. That a central theatre for lectures and demonstrations should constitute a part of the proposed additional buildings. 2. That the central theatre should be built so as to contain seats for an audience of about 250 persons. 3. That the plan submitted by the architect be, in its general arrangements, adopted, it being understood that the theatre shall be constructed to contain about 250 persons, and that the side wings be proportionally enlarged. 4. That a subcommittee be appointed to investigate and report upon the best arrangements at present existing in scientific institutions in the construction of a lecture theatre and laboratories. 5. That the appointment of the subcommittee be left in the hands of the two presidents of the Colleges, and that the subcommittee be requested to report within four months of this date to the committee.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

Copy Draft Petition for Charter and Power to grant Degrees.

TO THE QUEEN'S MOST EXCELLENT MAJESTY IN COUNCIL.

THE humble petition of the Royal College of Physicians of London and of the Royal College of Surgeons of England humbly sheweth as follows:—

1. Your petitioners, the Royal College of Physicians of London, are a corporation who, under an Act of Parliament, made and passed in the fourteenth and fifteenth years of the reign of his Majesty King Henry the Eighth, intituled the Privileges and Authorities of Physicians in London, and confirming certain letters patent, bearing date at Westminster, the 23rd day of September, in the tenth year of the reign of his said Majesty, were incorporated, established, and empowered by their then name of the President and College, or Commonalty of the Faculty of Physic in London, but are now known by the name of the Royal College of Physicians of London, and pursuant to bye-laws of the Corporation are governed by the president and Fellows of the College.

2. Your petitioners, the Royal College of Surgeons of England, are a Corporation incorporated or re-established and empowered under letters patent, bearing date at Westminster the 22nd day of March in the fortieth year of the reign of King George the Third; and further empowered by letters patent bearing date at Westminster the 13th day of February, in the third year of the reign of King George the Fourth, and by letters patent bearing date at Westminster the 14th day of September, in the seventh year of your Majesty's reign, whereby their present name was conferred on the corporation; and also, by further letters patent bearing date at Westminster the 18th day of March, in the fifteenth year of your Majesty's reign, and your petitioners, the Royal College of Surgeons of England, are now in accordance with the provisions of the said several letters patent, and their bye-laws and ordinances governed by a Council consisting of twenty-four persons elected by the Fellows of the corporation, and one of such twenty-four persons is the president of the Council and also president of the College.

3. By the Medical Act made and passed in the session of the twenty-first and twenty-second years of your Majesty's reign it was, among other things, enacted that any two or more of the Colleges or bodies mentioned in Schedule A to the said Act (which schedule mentioned along with others your petitioners the Royal College of Physicians of London and also your petitioners the Royal College of Surgeons of England) might with the sanction and under the directions of the General Medical Council, constituted by the said Act, unite and co-operate in conducting the examinations required for qualifications to be registered under the said Act.

4. Your petitioners under the provisions of the Medical Act have accordingly united and co-operated in a scheme constituting an Examining Board of the two Colleges in England and in making regulations for conducting the examinations required for the purpose of qualifications to be registered under the said Act, which scheme and regulations were approved and adopted by your petitioners the Royal College of Physicians of London on the 12th day of March, 1883, and by your petitioners the Royal College of Surgeons of England on the 29th day of April, 1883, and your petitioners have at their own expense caused to be erected and completed on or near the Thames Embankment, in the county of Middlesex, an Examination Hall for the purpose of conducting examinations, and examinations are now duly conducted there under the said scheme and regulations.

5. Your petitioners are desirous, and it is expedient in order to encourage proficiency in the Sciences of Medicine and Surgery, that your petitioners should be enabled to unite and co-operate not only in conducting examinations for the purposes of the Medical Act, but also for the purpose of conferring degrees in Medicine and Surgery on persons who, by passing the examinations formerly held by both of the said two Colleges separately, or by passing the examination held by the Examining Board of the two Colleges, or by passing any other examinations to be held by the two Colleges jointly or separately, have already acquired, or may hereafter acquire, the qualifications for registration under the Medical Act, and who shall have also complied with such further regulations (if any) or undergone such further examinations (if any) as it may be deemed proper to impose or require from time to time, and that for this purpose a Senate of Physicians and Surgeons should be constituted and incorporated, composed of an equal number of Fellows of each of the said two Colleges, with all such necessary or proper powers as your Majesty may graciously see fit to grant or confer.

Your petitioners therefore humbly pray as follows:—That your Majesty will be graciously pleased to incorporate the president for the time being of the Royal College of Physicians of London and twenty-three other persons to be elected from among the Fellows for the time being of the said College and also the president for the time being of the Royal College of Surgeons of England and all the other twenty-three members for the time being of the Council of the Royal College of Surgeons of England being Fellows thereof under the name and style of the Senate of Physicians and Surgeons, with perpetual succession and a common seal and power, by that name to sue and be sued, and with power to grant to persons who have obtained qualifications under the Medical Act and shall be otherwise properly qualified degrees in Medicine and Surgery, and with power, notwithstanding the statutes of mortmain, to take, purchase, and hold to them and their successors lands, buildings, and hereditaments, and with such further powers and subject to such provisions as your Majesty may think proper to grant or impose. And your petitioners will ever pray, &c.

Draft Charter.

Victoria, by the grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, to all to whom these presents shall come, greeting. Whereas the Royal College of Physicians of London are a corporation incorporated, established, and empowered under an Act of Parliament made and passed in the fourteenth and fifteenth years of the reign of his Majesty King Henry the Eighth, intituled the Privileges and Authorities of Physicians in London, and confirming certain letters patent bearing date at Westminster the 23rd day of September in the tenth year of the reign of his said Majesty, whereby certain physicians therein named, and all other men of the same faculty within the City of London and seven miles about, were incorporated and made one body and perpetual commonalty or fellowship of the faculty of physic by the then name of the President and College or Commonalty of the Faculty of Physic in London, but are now known by the name of the Royal College of Physicians of London, and, pursuant to the bye-laws regulating the corporation, are governed by the president and Fellows of the College. And whereas the Royal College of Surgeons of England are a corporation incorporated, or re-established and empowered, under letters patent bearing date at Westminster the 22nd day of March in the fortieth year of the reign of King George the Third, and further empowered by letters patent bearing date at Westminster the 13th day of February in the third year of the reign of King George the Fourth, and by our letters patent bearing date at Westminster the 14th day of September in the seventh year of our reign, whereby their present name was conferred on the corporation, and also by our further letters patent bearing date at Westminster the 18th day of March in the fifteenth year of our reign. And whereas the corporation of the Royal College of Surgeons of England are now, pursuant to the provisions of the said several letters patent and their bye-laws and ordinances, governed by a council consisting of twenty-four persons elected by the Fellows of the corporation, and one of such twenty-four persons is the president of the Council and also president of the College. And whereas by the Medical Act made and passed in the session of the twenty-first and twenty-second years of our reign it was, among other things, enacted that any two or more of the Colleges or bodies mentioned in Schedule A to the said Act (which schedule mentioned along with others the Royal College of Physicians of London and the Royal College of Surgeons of England) might, with the sanction and under the direction of the General Medical Council constituted by the said Act, unite and co-operate in conducting the examinations required for qualifications to be registered under the said Act. And whereas the Royal College of Physicians of London and the Royal College of Surgeons of England have, with the sanction of the General Medical Council, under the provisions of the Medical Act united and co-operated in a scheme constituting an examining board of the two Colleges in England, and in making regulations for conducting the examinations required for the purpose of qualifications to be registered under the said Act, which scheme and regulations were approved and adopted by the Royal College of Physicians of London on the 12th day of March, 1883, and by the Royal College of Surgeons of England on the 29th day of April, 1883, and the said Colleges have at their own expense erected and completed, on or near the Thames Embankment, in the county of Middlesex, an Examination Hall for the purpose of conducting examinations, and examinations are now duly conducted there under the said scheme and regulations. And whereas it is expedient in order to encourage proficiency in the sciences of Medicine and Surgery that the Royal College of Physicians of London and the Royal College of Surgeons of England should be enabled to unite and co-operate, not only in conducting examinations for the purposes of the Medical Act, but also for the purpose of conferring degrees in Medicine and Surgery on persons who by passing the examinations formerly held by both of the said two Colleges separately, or by passing the examination held by the examining board of the said two Colleges, or by passing any other examination to be held by the two Colleges jointly or separately, have already acquired, or may hereafter acquire, the qualifications for registration under the Medical Act, and who shall have also complied with such further regulations (if any), or undergone such further examination (if any) as it may be deemed proper to impose or require from time to time, and that for this purpose a Senate of Physicians and Surgeons should be constituted and incorporated, composed of an equal number of Fellows of each of the said two Colleges, with all such powers as are hereinafter conferred on such Senate. Now, know ye that we of our special grace, certain knowledge, and mere motion at the humble petition of the Royal College of Physicians of London and the Royal College of Surgeons of England do by these presents for us, our heirs, and successors, will, ordain, constitute, grant, and declare in manner following—that is to say:—

1. The following persons—namely, first the president for the time being of the Royal College of Physicians of London, and twenty-three other persons, being Fellows of that College, to be elected for the purpose in the same manner as the Fellows of that College are elected under the bye-laws and regulations of the said College for the time being in force; and secondly, the president for the time being of the Royal College of Surgeons of England, and all the other twenty-three members for the time being of the Council of the Royal College of Surgeons of England being Fellows of that College shall become, and from henceforth for ever hereafter shall be and remain by virtue of these presents one body, politic and corporate by the name of the Senate of Physicians and Surgeons, hereinafter in these our letters patent called the Senate, and by the name of the Senate of Physicians and Surgeons shall and may have perpetual succession and a common seal, with power to break, alter, and make anew the said seal from time to time at their will and pleasure, and by the same name shall and may implead and be impleaded before all manner of justices in all courts and in all manner of actions and suits, and shall be at all times for ever hereafter persons able and capable in law to take, purchase, possess, hold, and enjoy, and shall and may take, purchase, possess, hold, and enjoy, a Senate House and an Examination Hall, with their appurtenances, situate in the county of Middlesex, for the use and purposes of the Senate, and also any other lands, tenements, rents, or hereditaments, wheresoever situate, lying, and being, not exceeding the yearly value of £500 at the time of acquiring the same without incurring any of the penalties in any statute of mortmain, or anything in any statute of mortmain to the contrary notwithstanding.

2. Of the twenty-three persons first elected from the Fellows of the Royal College of Physicians of London to be members of the Senate three persons, to be determined among themselves by the Royal College of Physicians of London, shall go out of office on the first Thursday in July, 1888, and on the first Thursday in July in each following year until all have gone out of office, and when all the twenty-three members first elected have gone out of office, then the three members longest in office shall go out of office on the first Thursday in July in each year, and as between any two or more members who have been in office for the same period the Royal College of Physicians of London shall determine which of them shall go out of office.

3. Any member of the Senate being a Fellow of the Royal College of Physicians of London and going or about to go out of office shall be capable of re-election, and any member of the Senate being such Fellow may

resign his office of member of the Senate by letter addressed to the president of the Senate, and upon the going out of office, resignation, or death of any Fellow, or any other vacancy in the number of Fellows of the Royal College of Physicians of London holding such office, including a vacancy caused by succession to office of president of that College, some other Fellow of that College shall be elected in his place by the Fellows of that College.

4. The president for the time being of the Royal College of Physicians of London shall be the first president of the Senate, and shall hold office for such period not exceeding two years, as the Senate shall at their first or any subsequent meeting determine, and on the first president going out of office, the next president of the Senate shall be the president for the time being of the Royal College of Surgeons of England, who shall hold office for such period not exceeding two years, as the Senate at their then next or any subsequent meeting determine, and afterwards the president for the time being of each College alternately shall be president of the Senate for such period not exceeding in each case two years, as the Senate at their next meeting after the succession of a president to office, or at any subsequent meeting, may determine.

5. The Senate may elect any persons not exceeding two of their number to be vice-presidents of the Senate.

6. The vice-presidents shall continue in office for one year from the first Thursday in July in each year, or for such period less than a year, or from such other date as the Senate may from time to time determine, and shall be capable of re-election.

7. The president may resign his office by writing under his hand addressed to the Senate, and any vice-president may resign his office by writing under his hand addressed to the president, and any such writing may be delivered to the secretary of the Senate or any member of the Senate.

8. At any meeting of the Senate the president, if in attendance and if not then one of the vice-presidents who is in attendance, shall take the chair, and in the absence of the president and both the vice-presidents, some other member to be chosen from the members present shall take the chair and act as president.

9. The Senate shall hold their first meeting within six calendar months from the date of these our letters patent in such place and at such time as shall be appointed by writing under the hands of the president for the time being of the Royal College of Physicians of London and the president for the time being of the Royal College of Surgeons of England.

10. The Senate may make such rules and regulations as to the times and places of subsequent meetings and the mode of summoning the same as to the Senate may seem proper, which rules and regulations shall remain in force until altered at a subsequent meeting, and in the absence of any rule or regulation as to summoning a meeting the president for the time being of the Royal College of Physicians of London and the president for the time being of the Royal College of Surgeons of England may by writing under their hands, addressed to each other member of the Senate, summon a meeting at such time and place as they think proper.

11. All acts of the Senate shall be decided by the votes of the majority of members present at a meeting of the Senate, and the chairman shall, in addition to his vote as member of the Senate, have a casting vote in case of equality of votes.

12. No business shall be transacted at any meeting of the Senate unless there are at least twelve members of the Senate present at such meeting.

13. Notwithstanding any vacancy in the number of the members of the Senate, the Senate may exercise all powers conferred on them by these our letters patent.

14. The Senate may appoint a treasurer and secretary, and such other officers (if any) as they think necessary.

15. The Senate shall have power to confer on any person who, by passing the examinations formerly held by both of the said two Colleges separately, or by passing the examination held by the examining board of the said two Colleges, or by passing any other examinations to be held by the two Colleges jointly or separately, has already acquired or may hereafter acquire the qualifications for registration under the Medical Act, and who shall have also complied with such further regulations (if any) or undergone such further examination (if any) as the Senate may from time to time see fit to impose or require as a qualification for a degree, both or such one as the Senate may think proper of the following degrees—namely, the degree of Bachelor of Medicine and Bachelor in Surgery, and the degree of Doctor of Medicine.

16. The Senate may demand and take from each person who offers himself for examination the following fees—namely, for the examination (if any) required for the degree of Bachelor of Medicine and Bachelor of Surgery a fee not exceeding ten guineas, and for the examination (if any) required for the degree of Doctor of Medicine a fee not exceeding five guineas, but shall not demand or take any fee for granting any degree.

17. The Senate may, from time to time, make and alter any bye-laws and regulations (so as the same be not repugnant to the laws of our realm, or to the terms and general objects of these our letters patent) touching the qualifications for degrees, and the granting of the same and any other matters to be done under the provisions of these our letters patent, and all such bye-laws when reduced to writing and under the common seal of the Senate, and approved of and countersigned by one of our principal Secretaries of State, shall be binding on candidates for degrees, and for all other purposes within the provisions of these our letters patent.

18. Provided that any bye-law or ordinance to be made by the Senate shall not be of any force until our approval thereof shall have been signified to the Senate under the hand of one of our principal Secretaries of State, or the same shall have been otherwise approved in such manner as shall be directed by us with the advice and consent of the Lords Spiritual and Temporal and Commons of our realm in Parliament assembled. And we do hereby for us, our heirs, and successors further grant unto the Senate that these our letters patent, or the enrolment or exemplification thereof, shall be in and by all things good, firm, valid, sufficient, and effectual in law according to the true intent and meaning thereof, and shall be construed in the most favourable and beneficial sense for the Senate, notwithstanding any non-recital, misrecital, or imperfect recital, or any other omission, imperfection, or defect whatsoever, in these our letters patent. In witness whereof, we have caused these our letters to be made patent.

Witness ourself at our Palace at Westminster this day of in the fiftieth year of our reign.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Northampton Urban District.—The corrected death-rate for this borough during 1886 was 17 per 1000 living; the infantile death-rate exhibited some decrease, being 155·1 under one year of age to each 1000 registered births. Scarlet fever was more than usually prevalent, having caused 24 deaths; but though efforts are made, by way of disinfection, prohibitions as to school attendance, and visits of supervision, to control the disease, yet nothing seems to be done in respect of hospital isolation. Indeed, the borough infectious hospital has been so contrived as to be largely deterrent instead of attractive to those who should resort to it in the interests of the health of the community. Typhoid fever mortality has fortunately fallen very low in Northampton; only 3 deaths were caused by that disease in 1886. Excellent sanitary work in connexion with infectious diseases, overcrowding, slaughterhouses, &c., was carried out during the year; but amongst the unremedied nuisances, there still remain 127 cases of filthy houses and 62 of faulty drainage. There are parts of Northampton where the housing of the poor must be a constant cause of anxiety, and it is evident that Mr. Cogan does not ignore the needs of the borough in this respect.

Ilkley Urban District.—The annual death-rate for 1886 was 13·4 per 1000 in this northern summer resort, and Dr. Scott states that such infectious disease as prevails is generally the result of importation, the infection being brought in by those who seek a change of air after illness. But the need for means of isolation is none the less recognised, and steps are being taken to procure a hospital. The site provisionally selected is not thought to be the best available, but it must be remembered that perfect sites are not often procurable, and unless there are serious medical or social objections the authority should not be too particular. The need for an extension of drainage is urged, and it is clear that Ilkley stands in want of this further provision. So, also, improvement is called for in the matter of refuse disposal.

Ealing Urban District.—The death-rate in this western suburb only reached 11·3 per 1000 last year, and no death occurred from either scarlatina, small-pox, or diphtheria. Diarrhœa was somewhat fatal amongst children, but not exceptionally so when compared with ordinary urban populations. The new isolation hospital came into use for the reception of seven patients, and public baths have been opened. Amongst the other sanitary improvements which have been provided, Mr. Patten speaks satisfactorily of the destructor, which is used for refuse and for the purpose of dealing with the sludge from the sewage tanks.

Swinton Urban District.—Mr. W. M. Jones, referring especially to measles, reminds his authority that with their open yards, with only one closet to every three houses, with the proverbial sociability of the labouring classes, and with no infectious hospital, he fails to see how, when infection is introduced, it can be prevented from spreading. He trusts that the Swinton, Mexborough, and Wath Local Boards will combine in providing the latter requirement. The privy system which obtains is faulty both in point of its method of construction and in quantity. Dryness of contents, secured by the exclusion of rainfall, slops, and surface soakage, together with systematic mingling of ashes and excreta, can alone justify the midden-privy system, and even then the capacity of the structures must be so limited as to ensure frequent removal of contents by the authority themselves. The death-rate for 1886 was 15·8 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 4996 births and 3115 deaths were registered during the week ending June 25th. The annual rate of mortality in these towns,

which had steadily declined in the preceding four weeks from 20·4 to 18·4, further fell last week to 17·6, and was lower than in any previous week since the end of June, 1886. During the twelve weeks ending with Saturday last the death-rate in these towns averaged 19·9 per 1000, and was 1·5 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 7·2 in Halifax, 10·5 in Derby, 13·0 in Hull, and 13·3 in Nottingham. The rates in the other towns ranged upwards to 26·7 in Huddersfield, 26·8 in Manchester, 28·4 in Oldham, and 30·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 489 and 501 in the preceding two weeks, further rose last week (mainly owing to the increased mortality from diarrhœa) to 512; they included 213 from measles, 127 from whooping-cough, 69 from diarrhœa, 43 from scarlet fever, 31 from diphtheria, 29 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was registered during the week in Plymouth; while they caused the greatest mortality in Salford, Manchester, and Newcastle-upon-Tyne. The highest death-rates from measles occurred in Norwich, Huddersfield, Brighton, Manchester, Salford, Birkenhead, Oldham, and Newcastle-upon-Tyne; from whooping-cough in London, Birmingham, Preston, Cardiff, and Liverpool; and from scarlet fever in Newcastle-upon-Tyne and Blackburn. The 31 deaths from diphtheria in the twenty-eight towns included 19 in London 3 in Birmingham, 3 in Newcastle-upon-Tyne, and 2 in Liverpool. Small-pox caused no death either in Greater London or in any of the twenty-seven large provincial towns. Only three cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease, no new case having been admitted to these hospitals during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 333 to 213, further fell last week to 184, and were 36 below the corrected weekly average. The causes of 74, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Portsmouth, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Sheffield, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·9 and 19·3 per 1000 in the preceding two weeks, rose again to 20·3 in the week ending June 25th; this rate exceeded by 2·7 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·6 in Perth and 15·8 in Leith, to 21·9 in Greenock and 34·2 in Paisley. The 507 deaths in the eight towns last week showed an increase of 24 upon the number in the previous week, and included 38 which were referred to whooping-cough, 10 to diarrhœa, 9 to measles, 8 to scarlet fever, 5 to diphtheria, 1 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 71 deaths resulted from these principal zymotic diseases, against 76 and 90 in the preceding two weeks. These 71 deaths were equal to an annual rate of 2·8 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 32, 35, and 48 in the preceding three weeks, declined again last week to 38, and included 14 in Glasgow, 10 in Edinburgh, 8 in Dundee, and 3 in Greenock. The 10 deaths attributed to diarrhœa, of which 4 occurred in Edinburgh and 2 in Glasgow, corresponded with the number in the previous week, and were 1 below the number in the corresponding week of last year. The 9 deaths from measles were 4 below the number in the previous week, and included 5 in Glasgow, 2 in Aberdeen, and 2 in Greenock. Of the 8 fatal cases of scarlet fever, a decline of 2 from the number in the previous week, 5 were returned in Glasgow and 2 in Dundee. Three of the 5 deaths from diphtheria were also returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 109 and 76 in the preceding two weeks, further declined last week to 72, and were 14 below the number returned in the corresponding week of last year. The causes of 64, or nearly 13 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 31·2 and 26·7 per 1000 in the preceding two weeks, rose again to 27·6 in the week ending June 25th. During the twelve weeks ending on Saturday last the death-rate in the city averaged 28·7 per 1000, the mean rate during the same period being but 18·1 in London and 19·6 in Edinburgh. The 187 deaths in Dublin last week showed an increase of 6 upon the number returned in the previous week; they included 21 which were referred to measles, 4 to scarlet fever, 1 to diphtheria, 1 to whooping-cough, 1 to diarrhœa, and not one either to small-pox or "fever." Thus the deaths resulting from these principal zymotic diseases, which had been 21, 29, and 32 in the preceding three weeks, declined again last week to 28; they were equal to an annual rate of 4·1 per 1000, the rates from the same diseases being 3·1 in London and 3·0 in Edinburgh. The fatal cases of measles, which had increased in the preceding seven weeks from 6 to 18, further rose last week to 21. The deaths from scarlet fever, on the other hand, were fewer by 2 than the number in the previous week. The deaths of infants showed a considerable further increase upon recent weekly numbers, and those of elderly persons were also rather more numerous. Six inquest cases and 8 deaths from violence were registered; and 41, or nearly a quarter, of the deaths occurred in public institutions. The causes of 29, or more than 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

HAY ASTHMA.

To the Editors of THE LANCET.

SIRS,—As a severe sufferer for some forty-five years, perhaps a few personal experiences, as recalled by Sir A. Clark's lecture in your issue of the 11th inst., may not be unacceptable. My earliest recollections go back to school-boy days (aged eleven or twelve) of severe convulsive sneezing fits, some twenty-five or thirty acts in quick succession, in the summer months, and frequently in school hours, insomuch that I was suspected of causing them artificially and mischievously. Thence up to the age of fifty-six I suffered every summer. The attack commenced in May as slight catarrh, discharge and itchiness in nostrils and at inner canthi, sudden paroxysmal fits of sneezing, increasing in severity and frequency, some fifteen or twenty attacks daily, itchiness of nose and eyes becoming constant and almost unendurable, catarrhal conjunctivitis, hoarseness and sore throat supervening. The seizures mostly came on without warning and spontaneously, but a slight cause, a glare of sunshine or sudden breath of air, often evoked them. The alæ nasi, sore and chapped from friction, were intensely sensitive. The paroxysms were often cut short by an unusually violent convulsive effort to sneeze unexpectedly aborting. Hay or grass field invariably brought on an attack, otherwise climate or locality made little difference, except that during long sea voyages (round the Cape) I was free. My most painful reminiscences are of Manchester and Simla, than which no two climates can be more antithetic. At Mean Meer and Kurrache desert stations,

> "Where the bird dare not build, or insect wing
> Flit o'er the HERBLESS granite,"

I was as bad as at home.

The sequel is curious. At about fifty-six I became suddenly free, and have so continued, but with total absolute loss of all sense of smell, and consequent serious impairment of taste. As to heredity: for three generations, on both sides, I am the sole sufferer; but since last summer, the youngest of seven children, a lad of eighteen, has been seized. As to "nervous constitution:" in these instances I think it must be ignored. My own life has been active, more in the camp than in the study. My son is captain of his school's boating and football clubs. Though I consider myself free, yet perhaps I sneeze oftener than most people. A short time ago a gentleman asked me if I noticed anything particular in the room we were sitting in (a public reading room), as he himself never entered it without being attacked. There is a physiological puzzle in

the fact that snuff, however pungent, will not affect the taker if his attention is taken up, and, as it were, kept moving by confederates.

Perhaps connected with loss of smell I may add there comes now and then a subjective unearthly, not unpleasant sense, passing into vertigo and momentary unconsciousness. I underwent various methods of treatment without any alleviation. I remain, Sirs, your obedient servant,

H. D. F.

THE PURITY OF DRUGS.

To the Editors of THE LANCET.

SIRS,—In the article on adulteration which appeared in your issue of June 18th, you say, in reference to the purity of drugs: "The manufacturer commands the situation, for the dispenser cannot analyse every drug which he dispenses." As one who has had some twenty years' experience in pharmacy, I beg to differ from you; and as I am now not in business, I hope I take an unbiased view. I consider the dispenser who cannot guarantee the purity of every drug which he dispenses, either because he has made it or because he cannot analyse it, is not worthy of the confidence of the medical man whose instructions he has to carry out or of the patient whose money he takes. There are, I maintain, many pharmacists, some of whom are only in a small way of business, who are prepared to guarantee personally every drug which they dispense. If they cannot do so they have no right to demand special remuneration. The "examinations of the Pharmaceutical Society" are intended to test a man's qualification for this duty, and the spirit of emulation and the encouragement he receives from the members of the medical profession prompt him to its performance. Manufacturers, I am sure, would not agree with you in thinking they command the situation. They are animated by the same spirit as their brethren in the retail, and will do all they can to advance pharmacy, but they do not and cannot relieve the pharmacist of his personal responsibility. A drug or chemical which is not what it is represented to be, but which has by some mischance come into the market, does not, as a rule, have a very long run; some careful pharmacist detects its deficiency, due notice appears in the *Pharmaceutical Journal*, and usually it is immediately withdrawn. As an example, I may mention the notice of "Drumine" in that journal of June 18th. The real nature of this so-called alkaloid was detected by Mr. A. E. Tanner, and physicians were saved a long physiological trial of a worthless article. In such cases as the above, I agree with you that prosecution is not needed, a warning is sufficient. In any case of wilful adulteration, by all means punish the delinquent with the utmost rigour of the law, but as a rule it is by some oversight that drugs are below par. No class of the community so much desire the purity of drugs as pharmacists, and they would hail with gladness any means likely to improve the present high standard of purity. The members of the medical profession have it in their power to do more to advance this high standard for drugs than any amount of legislation. Let them entrust the dispensing of their prescriptions to those pharmacists who are prepared to give a personal guarantee with every drug which they dispense, and they will find that the dispenser can analyse every drug which he dispenses.—I remain, Sirs, your truly,

Fellowes-road, N.W. W. H. SYMONS.

A THERAPEUTICAL SOCIETY.

To the Editors of THE LANCET.

SIRS,—Several medical men in London and the provinces have determined to endeavour to form a "therapeutical society" in order to combat the present chaotic condition of the science. It is proposed that this society should not be representative of any particular school or theory of medicine, but be open to all qualified members of our profession. This proposition may appear somewhat startling to the older members of medical bodies, but it is considered that the "old order changeth, yielding place to new," and that the lines between so-called orthodox and unorthodox medicine have greatly changed their bearings. It will not be disputed by any of your readers that all members of our profession are actuated by one wish—viz., to cure or at least to diminish the sufferings of those who place themselves under their care. The various medical annuals that are published show what changes have taken place in treatment within the past few years, and the labours of Professors Ringer and Brunton have revolutionised the practice of medicine. It is further proposed that a "quarterly journal of therapeutics" should be published, edited by one or more well-known writers in this science. I have already obtained several names of medical men who are willing to assist in the formation of the society, and hope to be able to collect a sufficient number to call a meeting in October in order to arrange final details, to appoint officers, and to settle terms of subscription. If any of your readers would aid me in this matter by suggestions, or by sending in their names as willing to join the society when formed, they would greatly oblige. I am Sirs, yours faithfully,

A. GEORGE BATEMAN,

61, Longridge-road, S.W. Acting Hon. Sec.

THE VETERINARY PROFESSION AND PUBLIC HEALTH.

To the Editors of THE LANCET.

SIRS,—In an annotation in last Saturday's LANCET a lecture is given to the veterinary profession, and it is more than hinted that many of its members are inclined to look slightingly on scientific investigation, and at its conclusion a hope is expressed that the contagious diseases of animals may soon be as well differentiated as those of mankind are by the medical profession. May I be allowed, as a veterinary surgeon, to criticise our critics, and make a few remarks on the sometimes injudicious attitude of the medical towards the veterinary profession?

Let me begin by saying that we claim to be as scientific as the medical profession, and in proportion to our number to possess at least as many devotees of research. So far from being averse to scientific investigation, we gladly welcome it; but we should not be blamed because we do not at once accept the somewhat startling conclusions of Dr. Klein. We do not deride them, we wait for confirmation; and, with every disposition to assist his inquiries, we reserve our judgment.

As to the differentiation of the contagious maladies of animals, we claim to have made at least as much progress in that respect as has been made by the medical profession in human diseases; and we do not, as some of the medical profession do, every now and then make gratuitous attacks on what should be a sister profession in the daily press—attacks which (forgive me for saying so) almost invariably turn out to be ridiculously unfounded, and based on defective knowledge and information. I could give you numerous and laughable examples in this regard, dating from the time of the great cattle plague of 1865, and coming down to the present day.

If we may be, for once, quite good-humouredly, recriminative, we might point to what I will venture to call the very numerous *opprobria medicorum*, among which may be named phthisis, syphilis, cancer, pneumonia, diphtheria, rheumatism, tetanus, and a host of other maladies, of which the nature is not yet understood, and for which the treatment of the best medical authorities is so varied and contradictory as to show the thinking observer that the healing science is yet only on the threshold of knowledge, and that it has still far more to learn than it has thus far learnt since it first began to be rationally studied. Of course, I do not deny that in mine, as in all professions, some of the "old school" affect to look down upon scientific knowledge, but it is the same in the medical profession, which possesses many members who scoff at the germ theory of disease and deride the antiseptic treatment of wounds.

What we veterinary surgeons ask is, that before we are gratuitously attacked in medical and other journals by *medical men*, some inquiry as to facts should be made, and if it be then found that we are open to censure, we shall be treated with that measure of charity with which the medical profession can, in its own case, so ill afford to dispense. The enemies of the medical profession are numerous and powerful, and it seems a pity that it does not use greater efforts to work, so far as its interests allow, with the veterinary profession, which is one of its most loyal and unselfish allies. I am, Sirs, yours faithfully,

London, June 27th, 1887. JAMES LAMBERT, F.R.C.V.S.

SUBSTANTIVE *VERSUS* HONORARY RANK.

To the Editors of THE LANCET.

SIRS,—Notwithstanding that the editor of the *British Medical Journal* has received two or three telegrams from this country assuring him that "the officers of the Medical Staff in India thoroughly agreed with him in his action on the relative rank question," I think that, were it put to the vote, it would be found that the general opinion of the Department is more in favour of the views expressed in the editorial note and in "A. M. D.'s" letter in your journal of May 14th, received here by last mail, than of those so persistently upheld by your contemporary. I am not aware of how "the general opinion of the Department in India" was arrived at by the gentlemen who sent the telegrams. Although I have made it a point to inquire, I have not yet met an officer whose opinion had been asked. No doubt the majorities at the different stations from which the telegrams were sent, influenced a good deal by the senior officers at those places, were in favour of sending them; but it seems to me that they took upon themselves a good deal more than the circumstances of the case warranted in answering for "the Medical Staff in India." We require a rank for certain purposes; it is necessary to us as military officers, and we have got it laid down by warrant, and our chief, Sir Thomas Crawford, has expressed himself satisfied with it as so laid down. Let us, then, hope and endeavour to gain respect and influence rather as physicians and surgeons than as "honorary majors." I am, Sirs, yours obediently,

India, June, 1887. M. S.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NEWCASTLE ROYAL INFIRMARY.

BY HER MAJESTY'S command this infirmary is in future to be styled the Royal Infirmary for the counties of Newcastle-on-Tyne, Northumberland, and Durham. The House Committee of the infirmary has lately brought before the Sanitary Committee of our Corporation an exhaustive statement showing the number of cases arising from drunkenness and violence in Newcastle, and brought to the infirmary. The committee shows that these cases entail an annual cost of about £150, and ask the Town Council to recompense the infirmary for this outlay, seeing that the council are responsible for the maintenance of public order and the health of the city. The matter is to come up for further consideration, but I do not think that the council will entertain the proposal in a favourable manner. Mr. Page, in a case of torticollis following an obscure injury to the neck from a football accident, has lately cut down on and stretched the spinal accessory nerve. I hope in a future letter to let you know the effects of the operation.

TYNE PORT.

At a late meeting of the Tyne Port Sanitary Authority it was reported that during the months of April and May there had been inspected 1156 British steamers, 623 British sailing vessels, 236 foreign steamers, and 203 foreign sailing vessels, making a total of 2218 ships inspected. Notices were served or orders given to remedy sundry sanitary defects in 26 British steamers, 16 sailing vessels, 8 foreign steamers, and 13 foreign sailing vessels, all of which had complied, with the exception of three, which are to be looked after.

INSANITY IN THE COUNTY OF DURHAM.

The Durham County Asylum, Sedgefield, has been so overcrowded by the great influx of lunatics as to necessitate the temporary transfer last week of 100 patients, 50 male and 50 female, to the Lancashire County Asylum, Whittingham, near Preston. The Borough Asylum for Newcastle at Coxlodge is, I understand, quite full, and there is difficulty in getting paying patients of any class admitted.

LEAD POISONING.

An inquest was held in Newcastle last Saturday on the body of a man aged twenty-nine, who died after a short illness. It was shown that the deceased was engaged in the manufacture of green paint, of which lead is an ingredient, and while at work he was seized with convulsions and sickness, usual in these cases. The foreman of the factory contended that, as only a small quantity of lead was used in the manufacture of green paint, the occupation was harmless, but the evidence of Mr. Brown, surgeon, was very conclusive, as he found the characteristic blue line on the gums indicative of chronic lead poisoning, so that the jury on hearing this at once returned a verdict of "Death from the effects of lead poisoning."

Newcastle-on-Tyne, June 27th.

EDINBURGH.

(*From our own Correspondent.*)

CHALMERS HOSPITAL.

A VACANCY has occurred on the staff of this important institution in consequence of the resignation of Dr. Halliday Douglas, who has for more than a quarter of a century occupied the post of honorary physician to the hospital. Several names are already mentioned as those of probable candidates for the post, among them that of Dr. Geo. A. Gibson, secretary of the Royal College of Physicians of Edinburgh, lecturer on Materia Medica in the Extra-academical Medical School, and formerly for many years clinical tutor in the medical wards of the Royal Infirmary. Dr. J. Graham Brown is also said to be in the field as a candidate for the appointment, having already been connected with the institution in the capacity of resident surgeon some years ago. The office is one of great value from the opportunities of clinical observation which it affords. It differs, however, from similar posts in other hospitals in the absence of clinical teaching, which was specially provided against in the terms of foundation of the institution. It cannot therefore be looked upon as a component part of the Edinburgh teaching school; nevertheless, the value of the appointment in the direction indicated is such as to make it an object of ambition for men of such prominence as those mentioned, and for others whose names are not in the meantime so definitely spoken of as candidates.

THE JUBILEE HONOURS LIST.

While the sincerest satisfaction is universally felt at the added honours that have fallen to the lot of Sir Arthur Mitchell, K.C.B., and Sir George Macleod—honours that are felt to be no less becoming than they are well merited,—there has been a good deal of surprise at the abrupt termination of the list, which it was anticipated would have been somewhat lengthy. It is felt, however, that it is at present premature to give expression to any feeling of disappointment; but that it is more appropriate to consider the present list as an earnest of good things still to come, and to rejoice that places in the van of the expected marshaling of honours have been reserved for two so thoroughly worthy of that distinction.

EDINBURGH UNIVERSITY.

The final professional examinations for graduation in medicine are now in progress. Over 270 candidates have entered for the examination, and the oral part of the testing process occupies several hours each day. From the large proportion—three-fourths—of passes in the lists published up to the present, it would appear that the examiners are fortunate this year in meeting with a large average of well-prepared candidates for the degree. It is probable that August 2nd will witness the launching of over 200 fresh graduates on their voyage in search of professional success, each with the *imprimatur* of the Edinburgh Medical Faculty as the title-page of his professional log-book. Many of these graduates will doubtless find useful spheres in the colonies, from which, it is stated, fully one-third of our students are derived.

ROYAL HOSPITAL FOR SICK CHILDREN.

In consequence of Dr. Andrew's retirement by rotation from the staff of this hospital a vacancy occurs in the junior division of the honorary staff. Several candidates have presented themselves, and an energetic canvass is now proceeding in relation to the appointment. Among the competitors are Dr. John Thomson, formerly resident physician at the Great Ormond-street Hospital for Sick Children; Dr. Noel Paton, examiner in Physiology in the University

of Edinburgh, and formerly a resident physician in the Sick Children's Hospital; Dr. Felkin, well known for his scientific observations in Central Africa; and Dr. Haig Ferguson.

ROYAL MEDICAL SOCIETY.

This ancient Society, which has been possessed of a Royal Charter for over a century, held a Jubilee banquet last week in honour of the fiftieth anniversary of Her Majesty's reign. It was largely attended, and the proceedings were loyal and enthusiastic throughout. A loyal and dutiful address to Her Majesty recently presented by the Society was read by Dr. Taylor, the senior President, when proposing the toast of the Queen, and at the same time a telegram was forwarded to Sir H. Ponsonby, expressing the loyal devotion of those present who had assembled to do her honour.

Edinburgh, June 28th.

DUBLIN.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

AN address from the Council on the occasion of Her Majesty's Jubilee will be presented at Windsor this week by the President of the College, Mr. A. H. Corley.

UNIVERSITY OF DUBLIN.

At the annual meeting of the Senate last week the following grace, proposed by the Provost and senior Fellows, was adopted:—"1. Ad Baccalaureatum in Arte Obstetricia nemo admittatur qui prius Baccalaureatum in Medicina non susceperit. Priusquam gratia ejus proponatur, Candidatus a Professoribus Medicis in aula publica solenniter examinetur, atque idoneus comperiatur. 2. Formula supplicandi pro gradu Baccalaureatus in Arte Obstetricia R. R. Cancellarie, totaque universitas supplicat reverentiis vestris N. N. ut Baccalaureatus in Medicina, una cum omnibus exercitiis et examinationibus per leges et consuedines Academiæ requisitis, sufficiat et ad respondendum in Arte Obstetricia." This is a new degree of Bachelor in Midwifery, which has become necessary by the passing of the Act of 1886. The University law required candidates for the degree of Master in Midwifery to be a Master of Arts, and by the grace now adopted it will be sufficient for the candidate to be a Bachelor in Arts.

JUBILEE HONOURS FOR THE PROFESSION.

The marked absence of any distinctions to members of the profession in Ireland, at all events up to the present, while honours have been conferred on their English and Scotch brethren, must be regarded with extreme disapproval. The bad taste shown by ignoring their claims to Jubilee honours can scarcely be disputed, and although a supplementary "Jubilee Gazette" has been talked of, the most sanguine can hardly imagine that the names of any Dublin physician or surgeon will be included in the list of honours.

THE SANITARY CONDITION OF THE DUBLIN BARRACKS.

For several years past the insanitary condition of most of the Dublin b arracks, more particularly the Royal and Richmond, has attracted considerable attention, in consequence of the repeated deaths from typhoid fever which have occurred among men and officers. The military authorities, however, persistently denied that the sewerage arrangements were in any way defective, and so matters have been allowed to go on up to the present. Lord Beauchamp, it is satisfactory to learn, has now drawn attention to the matter, and last week in the House of Lords moved for a return of all cases of febrile and respiratory diseases which have occurred in the Dublin garrison since Jan. 1st, 1881, and which, after some discussion, was agreed to. The argument of Lord Harris in objecting to the return, to the effect that the death-rate among the garrison was lower than that of the civil population, is altogether outside the the question, as it is evident that the mortality among lower classes in this city is inevitably much higher than among a picked body of men like soldiers. It appears that the Secretary of State for War, as mentioned by me some months since, has directed an examination of the sanitary state of the Royal Barracks by Sir Charles Cameron, Medical Superintendent Officer of Health for Dublin, and Dr. Grimshaw, Registrar-General for Ireland, in conjunction with the Principal Medical Officer, which examination is now being carried out.

MERCER'S HOSPITAL, DUBLIN.

On Saturday last the Vice-Chancellor fixed the hearing of a motion made by Mr. Edward Stamer O'Grady, a well-known Dublin surgeon, for an injunction to restrain the governors of Mercer's Hospital and Dr. C. F. Knight from removing him from the surgical staff of that institution. The case will be heard on Monday next.

HOSPITAL FOR INCURABLES.

The foundation stone of the new Victoria Jubilee buildings at this hospital will be laid on the 29th by His Royal Highness Prince Albert Victor. The buildings are to be on the pavilion system, and will include special accommodation for patients suffering from phthisis and other affections of the respiratory system. The wards will be sheltered on the north and east, and will be heated by hot-water pipes as well as by open fireplaces. Ventilation will be carefully attended to, and all modern sanitary arrangements adopted.

ADELAIDE HOSPITAL, DUBLIN.

The Hudson Scholarship this year has been awarded to Thomas E. Dunne, and the Hudson Prize to Christopher Healy. The Scholarship consists of a gold medal and £30, and the Hudson Prize of a silver medal and £10.

CASE OF CONGENITAL GOITRE.

There is at present in Mercer's Hospital, under the care of Dr. C. F. Knight, an example of congenital goitre. The patient is a boy about a fortnight old, and both lateral lobes are enlarged. The mother has suffered from goitre for the past two years.

PARIS.

(From our own Correspondent.)

THE SEQUESTRATION OF BARON SEILLIÈRE.

A WELL-KNOWN member of society, Baron Seillière, has been somewhat hurriedly transferred to the *maison de santé* (as lunatic asylums are more discreetly termed in France) of the celebrated Dr. Falret. A sharp controversy has arisen in the press in consequence of this sequestration, and many of the writers are loud in denouncing the state of the law on the subject, and in abusing all those concerned in administering it. Baron Seillière bitterly complains of the whole proceedings. He declares his family laid a plot to entrap him. "I may have been eccentric, I may have spent money freely, but many a man in my position has done the same. If I have made bad speculations, I have also made successful ones, and as I neither think, speak, nor write as a madman, I consider myself the victim of an unjustifiable attack." On the other hand, Professor Charcot, who has interviewed the patient on behalf of his family, declares him to be insane. As I have already hinted, the comments of the press upon mental physicians and their doings are far from complimentary; and although there is no doubt a great deal of exaggeration, some of the statements made are not entirely devoid of foundation. It is an aphorism amongst French alienists that any person in Paris presenting signs of excitement should, in the absence of a satisfactory explanation, be suspected of general paralysis. Not only are the Parisians privileged in counting in their number the highest percentage and the most eminent sufferers from the *maladie du siècle*, but it is said also that Paris has a special attractive influence for general paralytics as a class. Given, then, a person in a state of excitement, he would, if he had the misfortune to be examined by an expert, run a very fair chance of being sent to an asylum. Once there, any explosion of indignation would be taken as additional evidence of the necessity of the measure, and if the victim were not calmed by being cut off from the world, and soothed by the application of a *camisole de force*, no sane alienist would entertain any further doubt as to the nature of his case. The lawyers maintain, and this is the practical outcome of the whole matter, that the *affaire Seillière* shows the urgent necessity of a change in the present law concerning the insane. As it is, they say, once a man has fallen into the hands of the alienists, the machinery of the

law is powerless to help him. He may, at the discretion of his keepers, be separated from the whole world, and even subjected to solitary confinement. Should those interested in his welfare think they have cause to complain, they are hardly able to obtain an independent examination. Those who have the patient in charge can refuse access to all except the expert commissioned by the courts in each particular instance; but as in lunacy practice the expert of to-day is often the alienist of to-morrow, the patient may benefit but little by such a consultation.

PASTEURIANA.

The Secretary of the Academy of Medicine states that the letter read by M. Peter some time back containing the unfavourable results of Cantini's inoculations, and purporting to have been written by Professor Tommasi, was apocryphal. In consequence of this letter M. Cantini had sent in his resignation as Member of the Royal Academy of Naples; but now that matters are explained, and it turns out that M. Peter was hoaxed, M. Cantini has, at the desire of his colleagues, withdrawn his resignation. M. von Frisch writes to the *Semaine Médicale* to claim the priority of the idea of testing the value of the preventive inoculations by previous intracranial inoculation. In his letter to the Vienna Society, which I mentioned last week, M. Pasteur declared that he had spoken of this to M. von Frisch, as he had to Professors Burdon Sanderson and Victor Horsley, and that it must be a slip of the memory on the part of M. von Frisch to attribute the idea to himself. In his letter to the Paris journal M. von Frisch denies this "in the most absolute manner." "It," writes he, "M. Pasteur will not allow that his pretensions are based upon an error of memory on his part, I shall be forced to repudiate with indignation this attack, so unjustifiable and so derogatory to my scientific honour." It is evident that the controversy is likely to enter into a still more acute period, and the report of the English experimenters, which is looked forward to with the greatest interest, would just now come at a most seasonable juncture. According to the official report of M. Labully, fifty-three persons were bitten by mad animals during the year 1886 in the department of the Loire. Of these twenty-six were treated at the laboratory without a death. One death took place amongst the remainder, but, according to the *Semaine Médicale*, none of those who underwent a mystic ceremony, in which an omelette plays an important part, have had reason to regret their confidence.

SALINAPHTHOL.

Salol is a compound body formed of salicylic acid and phenol, which is decomposed into its constituents in the intestine. Professor Lépine advocates the subetitution for it of a new compound, obtained by M. Merk, and which has been called naphthol-salol, naphthalol, &c., and for which he proposes the name salinaphthol:

$$C_6H_4.OH.CO_2H + C_{10}H_7.OH = C_6H_4.OH.CO.OC_{10}H_7 + H_2O$$

Salicylic acid + β-naphthol = sali-naphthol + H_2O.

Like salol, the efficacy of the new drug depends upon its decomposition in the intestine by the pancreatic secretion, and it is therefore inert and unirritating in the stomach. The advantage claimed for it over salol is that when split up into its component parts there remains besides the salicylic acid, which is the therapeutic agent, a by-product, β-naphthol, which is less toxic and less absorbable than the phenol which results from the decomposition of salol.

WATER-SUPPLY OF PARIS.

The Municipal Council has decided that whenever it should be necessary (and this is nearly always the case) to distribute typhogenic drinking water to some quarters of Paris, the supply of bad water shall in future be made to those districts inhabited by the wealthy. It was added that this substitution shall, however, be subject to the approval of the sixth commission. As a general measure, it may be wiser to expose the richer and healthier quarters to the dangers of typhoid, than to induce it with certainty in those which are overcrowded, but it is to be hoped that no change will be allowed to be made without a notice being sent to every interested party.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The annual general meeting of this Society will be held at the rooms of the Medical Society of London on July 27th, under the presidency of Dr. F. Needham.

VIENNA.

(*From our own Correspondent.*)

PASTEURIANA.

SOME weeks ago the results of Professor von Frisch's experiments on rabies were published by him in a book entitled "The Treatment of Rabies." Professor von Billroth felt himself compelled to strengthen the authority of his pupil by an article in a Vienna newspaper, in which the Pasteurian mode of treatment of splenic fever and of rabies was wholly condemned, and the book of Professor von Frisch was eulogised as a work bestowing new prestige upon our Vienna school. According to Billroth's opinion, it has been proved by Professor von Frisch that the value of Pasteur's preventive inoculations in man and in animals is problematical, and that it is possible by Pasteur's treatment that thoroughly healthy persons may be artificially made rabid. The charges brought forward by Professor Billroth caused M. Pasteur to send a letter to the Vienna Society of Physicians refuting the statements of the former. This letter was read at the meeting of the Society on June 10th. To prove the value of his method in the prevention of splenic fever he alluded to the results obtained by his inoculations in France, as shown by the following statistics of inoculated sheep and cattle. The mortality of non-inoculated sheep is 10 per cent.

Year.	Sheep.	Mortality.
1882	29,3199	1·08 per cent.
1883	19,3119	0·77 ,,
1884	23,1693	0·97 ,,
1885	28,0107	0·90 ,,
1886	20,2064	0·75 ,,
Year.	**Cattle.**	**Mortality.**
1882	22,916	0·35 per cent.
1883	20,901	0·35 ,,
1884	22,616	0·37 ,,
1885	21,703	0·50 ,,
1886	22,113	0·28 ,,

In non-inoculated cattle the mortality amounts to 5 per cent. Referring to the claim of priority made by Professor von Frisch, and supported by Professor Billroth, M. Pasteur in his letter states that he had communicated personally to Professor Frisch during his stay in Paris the results of experiments on preventive inoculations in dogs infected artificially by subdural injections with street rabies, which had not then been published. The same communication was made at the same time to the members of the British Committee (Professors Burdon Sanderson and Victor Horsley) and to Dr. Gamaleia of Odessa, who on June 6th, 1886 (before Frisch's first communication), at a meeting of physicians of Odessa said: "It was shown by M. Pasteur that in some cases, even after subdural infection, the outbreak of rabies could be prevented." In reference to another statement of Professor von Frisch, M. Pasteur claimed success in preventing the outbreak of rabies in dogs subjected to subdural infection; and these experiments, repeated by Dr. Bardach of Odessa, gave also the best results in ten cases out of seventy-five. But these experiments were only made as an *argumentum a fortiori* for Pasteur's treatment; while Frisch maintained that the value of Pasteur's method could only be proved by subdural infection followed by preventive inoculations. The experiments of Frisch, states M. Pasteur, were carried out inexactly; and while he made his experiments on dogs, the experiments of Frisch were made on rabbits. Frisch also failed in consequence of the slow process of inoculations adopted by him. In closing his letter, M. Pasteur laid stress on the positive results of his experiments, showing that even after subdural infection the animals can be made refractory by inoculations. Professor von Frisch denied the statements made in Pasteur's letter. He said that Professor Billroth was right in asserting that Pasteur had made a *fiasco* with his preventive inoculations for splenic fever, as could be seen by the publications of the Berlin School and by the refusal of the English Government to introduce Pasteur's method into England. As regards the rabies question, he denied that M. Pasteur had made to him any communication on the subdural infection experiments, and endeavoured to refute the objections made against his experiments.

DR. ULLMANN ON THE PREVENTIVE INOCULATIONS IN HYDROPHOBIA.

Dr. Ullmann, assistant of Professor Albert, has carried out Pasteur's treatment at the surgical clinics for some twelve months, during which time 118 persons have been treated. Of these, three persons died from hydrophobia; the others remained healthy. Dr. Ullmann is also carrying out experimental researches on animals, and at the last meeting of the Vienna Society of Physicians a preliminary note was read by him containing the following conclusions: (1) According to his experiments thus far, the animals do not succumb from rabies in consequence of preventive inoculations; (2) certain animals can be rendered refractory against rabies by preventive inoculations; (3) the statistics of preventive inoculations made by him in human beings are also favourable to the value of Pasteur's method.

THE PHOSPHATE OF LIME TREATMENT IN LOCAL TUBERCULOSIS.

Dr. Kolischer was at first of the opinion that it might be possible to produce calcification in tuberculous tissues by local application of strong solutions of lime. Strong solutions of calcic chloride, or carbonate of lime in water containing carbonic acid, and of neutral phosphate of lime in common salt solution, were used without result, till Herr Ernst Freund, who had some time ago discovered the presence of cellulose in tuberculosis, proposed to use primary phosphate of lime or calcium monophosphite, which is prepared by dissolving phosphate of lime in water, by slowly adding phosphoric acid. The following prescriptions are used:—

1. For injections (containing 1 per mille phosphoric acid): R. Calc. phosphor. neutr., 5·0 grammes; aq. destill., 500. Deinde sensim adde: acid. phosp. dil., 0·6; aq. dest. quant. suf. ad 1000. 2. For impregnating the gauze (containing 1 per cent. phosphoric acid):—R. Calc. phosphor. neutr., 50·0; aq. destill., 500·0. Deinde sensim adde: acid. phosphor. q. s. ut fiat solutio perfecta, filtra. Adde: acid. phosphor. dil., 60·0 (120·0); aq. destill. q. s. ad 1000·0.

In torpid cases a stronger solution for impregnating the gauze is used, containing 120·0 grammes acid. phosphorici (instead of 60·0). As I am informed by Herr Freund, he recommended this solution as a result of chemical analysis of the blood of tuberculous persons, carried out by himself in Professor Ludwig's laboratory. It seems that phosphoric acid is the real active principle of this solution.

Vienna, June 11th.

THE SERVICES.

Surgeon-General T. W. Fox, M.B., has assumed the duties of Principal Medical Officer at Aldershot in succession to Surgeon-General J. Hendley, C.B., who is about to be placed on the retired list.

Deputy Surgeon-General R. A. Chapple has joined at Mhow from Bombay for duty.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General Thomas William Fox, M.B., to be Surgeon-General, vice A. H. Fraser, retired (dated May 18th, 1887).

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon John Wood has been placed on the retired list of his rank (dated June 11th, 1887).

INFANTRY MILITIA.—5th Battalion, the Royal Munster Fusiliers: Surgeon-Major P. Enright, M.D., resigns his commission: also is permitted to retain his rank, and to wear the prescribed uniform on his retirement (dated June 25th, 1887).

ARTILLERY VOLUNTEERS.—1st Newcastle-on-Tyne: M. J. Wakefield, M.B., to be Acting Surgeon (dated June 25th, 1887). 2nd Volunteer (Sussex) Brigade, Cinque Ports Division, Royal Artillery: Surgeon R. V. Skinner resigns his commission (dated June 25th, 1887); Acting Surgeon H. Colgate, M.D., to be Surgeon (dated June 25th, 1887).

THE VOLUNTEER MEDICAL STAFF CORPS.—The London Division: Surgeon Richard Lake resigns his commission (dated June 25th, 1887).

ON the 25th ult. a dinner was held in connexion with the Edinburgh Royal Medical Society, Dr. James Taylor, senior president, in the chair.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following candidates having conformed to the bye-laws and regulations, and passed the required examinations, had the Licences to practise Physic granted to them on June 27th:—

Brook, Henry Darville, St. Thomas's Hospital.
Chapman, Robert Hugh, St. Bartholomew's Hospital.
Cooke, Cecil Whitehall, St. Thomas's Hospital.
Feeny, James Aloysius, Cloudesley-square.
Gay, John, City of London Hospital, Victoria-park.
George, Henry, Harleyford-road, Vauxhall.
Grogan, Henry William, Camden-gardens.
Hawthorn, Herbert John, Malmesbury-road, Bow.
Heatley, William, London Hospital.
Hewan, John, Belgrave-road.
Jones, John, St. Bartholomew's Hospital.
Lewis, Benjamin Adam, Lichfield-road, Tredegar-square, Bow.
Mac Carthy, Ibar, Kempsford-gardens, South Kensington.
Pott, Francis Henry, Newland-street, Eaton-terrace.
Read, Bertram Thomas, St. George's Hospital.
Read, Henry George, Finsbury-square.
Roberts, Robert Herbert Mills, Harleyford-street, Kennington.
Rose, Percy, Guy's Hospital.
Saunder, Charles Stirling, Ledbury-road, Bayswater.
Scott, George Reynold Schofield, Ridge-field, North-hill-road, Headingly, Leeds.
Smith, E. Locke Cathcart, Blenheim-crescent, Notting-hill.
Tordoff, Sargen, Louis-street, Chapeltown-road, Leeds.
Vinter, Sidney Garratt, Monmouth-road, Bayswater.
Wigg, James, Hackney-road.
Wigmore, Arthur William, Inverness-terrace.
Wilson, Robert James, Endsleigh-street.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma were admitted Members of the College at an extraordinary meeting of the Council on June 27th:—

Adami, John George, Ashton House, Ashton-upon-Mersey.
Allan, James Hugh Brodie, Victoria-street, Montreal, Canada.
Anderson, Ernest Chester, The Chaplaincy, Bodmin.
Aveline, Henry Talbot Sidney, Park-place, Clifton, Bristol.
Benson, Alfred Hugh, Marchlands, Stoke Bishop, Bristol.
Brewis, Andrew Seymour, Eskdale-terrace, Newcastle-on-Tyne.
Brockway, Archibald Birt, Lambeth-palace-road.
Brook, Henry Darvill, Fareham, Hants.
Burns, Theodore Gilbert Alex., Montague-street.
Canney, Henry Edward Leigh, Belsize-avenue.
Clifford, Thomas, Thornhill-terrace, Sunderland.
Cooke, Albert William, Great Coram-street.
Cressy, Arthur Zell Claydon, Wallington, Surrey.
Dabell, Thomas James, Fernlea-road, Balham.
Day, Francis Wm. Henry Langston, Limpenhoe, Norfolk.
Deanesly, Edward, Albert-street, Regent's-park.
Edridge-Green, Frederic William, Belsize-square.
Ewbank, William Withers, Earl's-court-road, Kensington.
Feeney, John Aloysius, Cloudesley-square.
Fox, Frederic Geo. Townshend, Queen Adelaide-road, Penge.
George, Henry, Kirton-in-Lindsay.
Gill, Rainsford Foster, King Henry's-road.
Green, George Sydney, Kildare-terrace, Westbourne-park.
Halliday, Frederick Wm., Manor House, Bramley, Leeds.
Houghton, Philip Arthur, Lancaster House, Porchester-gate.
Hoysted, Lionel Norton, Clapham-road.
Johnson, John Mountfort, Leek, Staffordshire.
Jones, Guy Charleton, Beaumont-street.
Jones, Henry John, Fawcett House, Kennington Oval.
Jones, Oswald Meredith, Landilo, South Wales.
Kanthack, Alfred Antunes, Granville-square.
Ker, John Errington, Royal-park, Clifton, Bristol.
Lang, George Herbert, Albert-street.
Leche, Arthur, Freeland-place, Clifton, Bristol.
Lush, Percy John Frederick, South Hampstead.
Mader, Pieter Johannes, Warrenden-park-road, Edinburgh.
May, William Page, Blackheath.
Nall, Joseph, Whaley-bridge, near Stockport.
Nixon, John, Corley, Northamptonshire.
Ord, William Wallis, Upper Brook-street.
Parker, Frederick William, Brussels-road, New Wandsworth.
Pearman, Thomas Edward Allaway, Sutherland-place.
Phillips, George Gordon Owen, Castletown-road.
Phillips, Herbert Charles, Gayton-crescent.
Poolman, Arthur Edward, Maze-pond, Borough.
Price, George Elliot, St. Owen's-street, Hereford.
Read, Bertram Thomas, Petersham-terrace.
Read, Henry George, Finsbury-square.
Rennie, George Edward, Lonsdale-square.
Rhodes, Harvey, Long-street, Middleton.
Roper, Herbert John, Clarendon-villas, Cleckheaton.
Routh, Charles Frederick, Church-terrace, Lee.
Rust, John, The Grove, Ditchington.
Saunders, Henry, High-street, Eton, Bucks.
Seagrave, George Henry, Lissington Manor, Wragby.
Staniforth, John William, Upperthorpe, Sheffield.
Thomas ohn Lewis, King-street, Brynmawr.
Thompson, Charles James, Montague-place, Poplar.
Tunstall, John Ogle, Brighton House, Olton, Birmingham.
Ward, Howard Percy, Stanwell.
Wheeldon, Frederick John, Stockport-road, Manchester.
Wisken, Charles, Hazethorpe, Heywood, near Manchester.
Wooldridge, Arthur Tyler, Winchester, Hants.

The following gentlemen, having passed the required examinations, were admitted Licentiates in Dental Surgery of the College:—

Battersby, James, Market-street, Manchester.
Cater, Alfred Parker, Clifford's-inn, Fleet-street.
Frost, Abraham William, North-hill, Colchester.
Linnell, Percy Allison, Edge-lane, Manchester.
Lovitt, Robert James, Wells-road, Hampstead.
Petit, Charles Frederick Newton, Camden-street.
Read, Thomas George, Cavendish-square.
Robinson, Charles Cecil, Broadway, Streatham.
Rymer, James Francis (M.R.C.S. Eng.), Pevensey, Croydon.
Seymour, George, St. Augustine's-road, Camden-square.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At Examinations recently held the following out of the eighteen candidates who entered passed the first half of the examination for the Letters Testimonial of the College, under the old scheme regulations:—

Ninian N. S. Blackham, Daniel Connor, Walter B. Croker, William F. Dillon, Francis O'Mara, Daniel Power, and James F. McMonagle.

SOCIETY OF APOTHECARIES.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society on June 23rd:—

Archer, E. Richard Barnes, Donegal-terrace, Stoke, Devonport.
Black, George, Pembroke-road, Walthamstow, Essex.
Claremont, Constantine Cecil, Millbrook House, Hampstead-rd.
Green, George Sydney, Kelvedon, Essex.
Johnson, John Mountfort, Roche-terrace, Leek.
Owen, David, Fenwick-street, Hulme, Manchester.
Rhodes, Harvey, Long-street, Middleton, Manchester.
Ward, Howard Percy, Silverbeck, Hanwell, Middlesex.

The class list of the Arts Examination of the Society of Apothecaries has just been published. The total number of candidates, it appears, was 201. One candidate is placed in the first class, and 35 in the second. Of the remainder, 124 passed in one or more subjects, but not in all; and 41 failed to reach the required standard in any subject.

At the recent examination for the Prizes in Botany given annually to medical students by the Society, the successful candidates were the following:—

1. Holburt Jacob Waring, St Bartholomew's Hospital. Gold Medal.
2. Charles Arthur Kent, University College. Silver Medal.

Prizes in Botany also are given annually to young women under twenty years of age; of whom the successful candidates were the following:—

1. Sophie Margaret Fedarb, Whiteland's College, Chelsea. Gold Medal.
2. Ella Oswald, Regent's Park College. Silver Medal.

Six candidates were awarded certificates of merit.

THE recent Hospital Saturday collection in Hull has realised £286, against £311 last year.

THE TARIFF OF MODERN DRUGS.—The Spanish College of Pharmacists has appointed a committee to report upon the newer pharmaceutical preparations which are not included in the official tariff, in order that the prices at which they are dispensed may be definitely fixed.

AN inquest was held on the 23rd ult. at Colney Hatch Asylum upon the body of an inmate who had died from poisoning by carbolic acid, administered through a mistake of the dispenser. The jury returned a verdict of death by misadventure.

MEDICAL MAGISTRATE.—The Lord Chancellor has placed the name of Mr. H. J. Lloyd, L.R.C.P., &c., Ty'nycoed Barmouth, upon the Commission of the Peace for the county of Merioneth, and was qualified at the Quarter Sessions held at Dolgelly on the 28th inst.

PRESENTATION.—Mr. F. W. Alexander has been presented with a writing cabinet, a liqueur case, and an illuminated address by the officers and staff of the Mile-end Old Town Infirmary, upon his resigning the post of assistant medical officer to that institution.

THE POLLUTION OF THE THAMES.—On the 29th ult., in the Lord Chief Justice's Court, the grand jury found a true bill against the Local Board of Staines for polluting the Thames with the sewage of the town. The prosecutors are the Conservators of the Thames.

CARTAGENA.—A memorial has been presented to the Spanish Court by the Medico-Pharmaceutical Academy of Cartagena, begging that the Almarjal may be drained, as the only means of checking the malarial fever which is so prevalent in the neighbourhood.

H.R.H. Princess Beatrice will present certificates to the Polytechnic classes of the St. John Ambulance Association on July 6th.

TRIESTE HOSPITAL.—£6000 has just been left to this institution by the deceased Herr Esser; £1000 of the legacy is to be applied towards building a Convalescent Home on the Kockelsberg.

SUPPOSED SUICIDE NEAR LEEDS.—On Wednesday morning last a man was found dead, with a bottle labelled "poison" by his side, on Calverley-moor, near Leeds. The deceased has since been identified as a member of a Volunteer Corps.

ON the 25th ult. the King of the Belgians paid a visit to the East London Hospital for Children at Shadwell, and on his departure from the institution expressed his satisfaction at the condition of the hospital, and announced his willingness to become a patron of the institution.

THE DROUGHT.—The prolonged drought is beginning to be inconveniently felt in different parts of the country. At Swansea the scarcity of water is such that the water committee are taking steps to utilise the water in a large disused colliery.

CHARING-CROSS MEDICAL SCHOOL.—On the 28th ult. Sir John Lubbock, M.P., presided at the distribution of medals, prizes, and certificates gained by the students of this school during the summer session of 1886 and the winter session of 1886-7. The annual report read by the Dean was of a highly satisfactory character.

HOSPITAL SATURDAY FUND.—At a meeting of the delegates of the Hospital Saturday Fund, held on Saturday evening at 41, Fleet-street, the Secretary reported that the recent street collection reached nearly £5000. The Dean of Westminster had forwarded £410, being one-sixth of the net proceeds of the service at the Abbey on the 22nd ult. on behalf of the London hospitals.

HOSPITAL AT TEHERAN.—The Shah of Persia has authorised the American missionaries to establish at Teheran a hospital in which, without regard to nationality or religion, all applicants for relief may be received for treatment. Dr. Torrence, physician to the mission, has been appointed director of the hospital, and the Shah has named him Grand Officer of the Order of the Lion and the Sun of Persia.

OPEN PRIZE COMPETITION.—The Medical Institute of Valencia, offers gold medals for the best works on the following topics:—1, Chorea; 2, Ovarian Tumours; 3, The Medicinal Plants of Valencia; 4, Any scientific subject at the option of the author. The essays, which may be written in English, are to be sent to the "*Secretario de Gobierno calle del Triador*," No. 11, by December 1st, 1887. The announcement of the results will take place on March 31st, 1888. The competition is open to medical men and pharmacists of all nationalities.

THE GOVERNMENT AND EDUCATIONAL GRANTS.—A deputation waited upon the Chancellor of the Exchequer on Thursday last to urge upon him their views on the subject of Government assistance to university colleges in England. They drew the attention of the Chancellor of the Exchequer to the fact that the local support given to university colleges in many of the largest centres of population in England has been inefficient, and they urged that these colleges have strong claims for Government aid to supplement local efforts, precedents for such grants being already established by the aid given to colleges in Scotland, Ireland, and Wales. It was pointed out that Wales, with three centres and an aggregate population within twenty miles of those centres of 452,000, enjoys grants of £12,000; Scotland, with five centres (1,260,000), £16,075; and Ireland, with three centres (400,000), £24,500; while England, with ten centres where local collegeges exist, with an aggregate population in the neighbourhood of nearly 12,000 000, receives absolutely nothing from Government. The claims of these colleges are based on their services in education in literature and pure science, higher technical instruction, and higher popular education. The deputation suggested that such grants should be applied partly in direct grants and partly in exhibitions. Mr. Goschen assured the members of the deputation of his deep interest in the educational question, and that their views would have every consideration.

SAD ACCIDENT.—On Wednesday, whilst a party of nurses of the Leeds Infirmary were proceeding in waggonettes to Bolton Woods for their annual excursion, the horses attached to one of the vehicles became unmanageable, and the conveyance was upset. The majority of the occupants were thrown out. Five were seriously injured, and had to be conveyed as patients to the institution where they were accustomed to act as ministrants to the sick, whilst others sustained slighter injuries.

SWINE FEVER AND PLEURO-PNEUMONIA IN KENT.—The returns from the Kentish authorities on the 28th ult. show a further extension of swine fever, fresh cases having occurred at Crayford, Dartford, Teynham, and Tunbridge. During the last ten weeks pleuro-pneumonia has broken out at Cowden, and eighteen affected animals and three healthy animals that had been in contact with some so affected have been slaughtered, the sum of £292 having been paid to the owners in compensation. The compensation for the slaughter of animals affected with swine fever during the same period has amounted to £603.

MEDICAL NOTES IN PARLIAMENT.

Sanitary Condition of Dublin Garrison.

In the House of Lords on the 23rd ult. Earl Beauchamp moved for a nominal return of all cases of febrile and respiratory disease which had occurred in the Dublin garrison since Jan. 1st, 1881, distinguishing in each case the barracks.—Lord Harris reminded the noble Earl that barracks were about to be erected on another site in Dublin, and £15,000 had been taken for that service in the estimates for the present year. As soon as the whole of the ground was obtained—there had been some legal difficulties with regard to a part of it.—cavalry barracks would be erected, and the Royal Barracks, Dublin, with regard to which there might possibly be some suspicion of insanitary condition, would be remodelled and used only for infantry. In the barrack annual estimates of this year a sum of £1089 was taken for specific improvements at the Royal Barracks, and £300 for various sanitary purposes in the Dublin barracks generally.—The Earl of Carnarvon trusted that the Government would apply themselves to remedy the insanitary condition of the Royal Barracks, the question being one of a most serious character.—Viscount Powerscourt agreed with the noble lord, the late Lord-Lieutenant of Ireland, as to the state of the Royal Barracks. He knew as a fact that the barracks in Dublin had for many years been in a very insanitary condition.—The motion was agreed to.

Dog Regulations.

In the House of Commons, in reply to Sir J. Commerell, Mr. Matthews stated that the rabies order of 1886 enabled local authorities from time to time to make regulations as they thought fit for the regulation of dogs. Such regulations, when made, only applied to the district of the local authority by whom they were made. The anomaly in the suburbs of the borough of Southampton, which were in the county of Hants, by which on one side of the street dogs might roam about unmuzzled and not under control, while on the other side of the street such liberty was an offence, was apparent, but there was no means of avoiding it, as he had no power to alter the boundaries of local authorities.

Coal Mines Regulation Bill.

The House went into committee upon this Bill, resuming the discussion of the amendment to Clause 8, the object of the amendment being to exclude girls from the operation of the clause, and so to prevent them from being employed. After a long discussion the amendment was rejected by 188 votes to 112. It was decided that no boy under twelve years of age nor girl under fourteen should be permitted to work. Other clauses, one of which rendered it compulsory for the owner, agent, or manager of every mine to keep a register of all boys, girls, and women employed in connexion with the mine, were passed, and progress reported.

On the 24th ult., the House again went into Committee on the Bill, and several clauses relating to the position and duties of the check weighers, the position of the shafts or outlets, the adequate provision of appliances for ventilation and apparatus for ascending and descending the shafts were adopted. A discussion then followed on the management of mines, which was not concluded at the hour when by the rules of the House the debate stood adjourned.

Vaccination.

On the 24th ult., in reply to Mr. Bradlaugh, Mr. Ritchie said that he was aware that in several towns, parts of towns, and villages, associations for the abolition of compulsory vaccination have issued forms in which questions have been submitted with reference to vaccination, but no precise information as to the mode in which the inquiry was conducted or in how many cases the persons applied to declined to fill up the forms distributed by those associations. No doubt the returns which have been made by the associations referred to represent that a considerable majority of those who have thought fit to fill up the forms have stated that they were opposed to vaccination. No one was more desirous than himself that vaccination should be performed with due care, and he might mention that revised instructions to vaccinators had been recently issued with a view to securing every requisite precaution in vaccination. For reasons which he had more than once stated in the House it was not his intention to propose a public inquiry.—In reply to Mr. Channing, Mr. Ritchie stated that he was aware that in some towns the provisions of the Vaccination Acts were not carried out in the same entirety as in others, but that was no reason why they should alter the law as it now exists. It was not his intention, in connexion with the Local Government Bill or otherwise, to propose any alteration of the existing law as to vaccination.

Holyhead Union.

In answer to Mr. Lewis, Mr. Ritchie said that it was the case that Dr. Harvey, who was acting as a medical inspector of the Local Government Board, visited the Holyhead Union with a view of reporting on its sanitary condition and the prevalence in the district of enteric fever and diphtheria. The Board had not declined to sanction the appointment of the medical officer of health, but they were clearly of opinion that he ought to devote more time to his duties than heretofore. Dr. Harvey is not now in the service of the Board, and since notice of the question was given Mr. Ritchie had been unable to communicate with him as to the precise time devoted to his inspection and the number of houses visited by him. There was no reason whatever to doubt that he devoted as much time to the inquiry as was necessary to enable him to ascertain the facts required to be reported to the Board as to the sanitary condition of the district. The sanitary authority have applied to the department for a copy of Dr. Harvey's report, and the Board on the 14th ult. furnished them with a full copy of so much of the report as referred to the sanitary condition of the district.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ARKLE, CHARLES JOSEPH, M.B., M.R.C.S., has been appointed Resident Medical Officer to University College Hospital.

ATKINSON, JOHN M., M.B.Lond., M.R.C.S., has been appointed Medical Officer for the Third District of the St. Mary Abbott's, Parish of Kensington, Union.

BARON, BARCLAY J., M.B., C.M.Ed., has been appointed Lecturer on Practical Pathology and Morbid Anatomy at the Bristol Medical School.

CARTER, G. A., M.D.Aber., L.R.C.S.Ed., has been appointed Medical Officer for the St. Chads District of the Lichfield Union.

DAVIDSON, J., has been appointed Public Analyst under the Food and Drugs Act for Dumfriesshire and the Burghs of Dumfries, Annan Sanquhar, and Lochmaben.

FAULKNER, WILLIAM COOKE, M.B., C.M.Ed., has been appointed Medical Officer for the Second District of the Eastbourne Union.

GABE, JOHN REES, M.R.C.S., L.S.A., has been appointed Medical Officer for the Third District of the Holborn Union.

GALLIE, C. P., M.B., C.M.Glas., has been appointed Medical Officer to the Camberwell Provident Dispensary.

GOODALL, E., M.B., B.S.Lond., has been appointed House-Physician to Guy's Hospital.

HUME, DAVID, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the North District of the Whitechapel Union.

JOHNSTON, DAVID, M.D.Aber., L.R.C.S.Ed., has been reappointed Consulting Physician to the Montrose Asylum and Infirmary.

JONES, JOHN TALFOURD, M.B. Lond., M.R.C.S., on resigning the Physicianship of the Brecknock County and Borough General Infirmary, has been elected Consulting Physician to that hospital.

JONES, THOMAS J., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the St. Weonard's District of the Ross Union.

LAWRENCE, SAMUEL, M.D.St. And., L.R.C.S.Ed., has been reappointed Medical Officer to the Montrose Asylum and Infirmary.

LEIGH, J. DICKINSON, M.B., C.M., L.R.C.P., L.R.C.S., L.F.P.S.Glas., has been appointed Resident Medical Officer to the Smithdown-road Workhouse, Liverpool, vice David Smart, M.B., C.M., B.Sc., resigned.

LESLIE, W. MURRAY, has been appointed Medical Examiner of Candidates under the School Board of London.

LYONS, ALFRED DE COURCY, M.B., C.M.Aber., has been appointed Medical Officer for the Seventh District of the Bedminster Union.

MANBY, E. P., M.B., B.C.Cantab., has been appointed Resident Obstetric to Guy's Hospital.

MARSH, FRANK, F.R.C.S., has been elected Honorary Surgeon to the Queen's Hospital, Birmingham, vice Furneaux Jordan, resigned.

METZGAR, C., M.R.C.S., L.R.C.P., has been appointed Resident Obstetric to Guy's Hospital.

NORMAN, F., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer to the Camberwell Provident Dispensary.

OSWALD, H. R., M.D., C.M.Edin., has been appointed Medical Officer to the Camberwell Provident Dispensary.

ROPER, H. K., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to Guy's Hospital.

ROWELL, G., F.R.C.S., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to Guy's Hospital.

STONE, VALENTINE, F.R.C.S.Ed., L.R.C.P.Ed., has been appointed Medical Officer to the Montrose Asylum and Infirmary.

TABOR, CHARLES J., M.B.Dur., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer for the Parish of Illogan, Redruth Union, Cornwall.

TAYLOR, A. S., M.B., B.S.Lond., has been appointed House-Physician to Guy's Hospital.

VILLANUEVA, F. HORTON, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Camberwell Provident Dispensary.

WASHBOURN, J. W., M.B., B.S.Lond., F.R.C.S., has been appointed Resident Obstetric to Guy's Hospital.

WILLIAMS, E. LLOYD, M.R.C.S., L.R.C.P.Lond., L.S.A., L.D.S.Eng., has been appointed Assistant Dental Surgeon to the Dental Hospital of London, vice Claude Rogers, M.R.C.S., L.D.S.Eng., D.M.D., promoted.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BRISTOL ROYAL INFIRMARY.—Obstetric Physician.

BRITISH MUSEUM.—Swiney Lecturer on Geology. Stipend £150 a year.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Resident Clinical Assistant.

KENT COUNTY LUNATIC ASYLUM, Chartham Downs, near Canterbury.—Second Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board, and attendance.

KILBURN, MAIDA VALE, AND ST. JOHN'S-WOOD GENERAL DISPENSARY.—Honorary Physician.

QUEEN'S HOSPITAL, Birmingham.—Casualty Surgeon. Annual honorarium £50.

SEDBERGH UNION.—Medical and Vaccination Officer for the Dent District. Salary £20 per annum, with vaccination fees.

REETH UNION, North Riding of Yorkshire.—Poor Law Medical Officer for the Muker District, and Medical Officer of Health for the whole Union. Total emoluments about £107.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo-bridge-road, S.E.—Physician.

SALFORD INFIRMARY.—Assistant House-Surgeon. Board, lodging, &c., but no salary.

SOUTHPORT INFIRMARY AND LOCAL DISPENSARY.—House-Surgeon. Salary £100 per annum, with board, furnished rooms, and attendance (but no stimulants).

TRURO UNION.—Medical Officer and Public Vaccinator for the District of St. Just. Salary £20 per annum, exclusive of the fees as allowed by the Local Government Board.

WESTMINSTER GENERAL DISPENSARY, Gerard-street, Soho, W.—Honorary Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

BENOLY.—On the 25th ult., at Kenninghall-road, Clapton, the wife of N. Benoly, M.D., L.R.C.P., of a daughter.

CHAMPNEYS.—On the 22nd ult., at Great Cumberland-place, the wife of Francis Henry Champneys, M.B., F.R.C.P., of a daughter.

CLAREMONT.—On the 21st ult., at Spring Vale, Green-road, Southsea, the wife of Claude C. Claremont, M.D., B.S.Lond., of a son.

JONES.—On the 22nd ult., at Shipley, Yorks, the wife of Herbert Jones, L.S.A., of a daughter.

JOUBERT.—On May 21st, at Calcutta, the wife of Surgeon-Major C. H. Joubert, of a son.

LEGGATT.—On the 19th ult., at Walton-place, S.W., the wife of Ashley Leggatt, M.B., of a daughter.

MASTERS.—On the 27th ult., at Rotterfield, Sussex, the wife of Alfred T. Masters, L.S.A., of a son.

NEWTON-CLARE.—On the 18th ult., the wife of E. S. Newton-Clare, M.R.C.S., L.S.A., Calne, Wilts, of a son.

RENTON.—On the 22nd ult., at Bowmont Lodge, Bruntsfield-terrace, Edinburgh, the wife of David Renton, M.D., Hon. Brigade Surgeon, of a son.

WOODS.—On the 18th ult., at Ebury-street, the wife of David Woods, M.D., of a son.

MARRIAGES.

COCK—FLAMANK.—On the 25th ult., at Holy Trinity Church, Exmouth John Cock, L.R.C.P.Lond., M.R.C.S., to Mary, eldest daughter of the late John Flamank, Esq., of Teignmouth, S. Devon.

JAMES—PHILIPSON.—On the 21st ult., at Christ Church, Plymouth, Charles Alfred James, M.R.C.S., L.R.C.P.Lond., to Annie Lucy, eldest daughter of the late Rev. W. Philipson, M.A., Rector of Bradley, Lincolnshire.

JOHNSON—ROBINS.—On May 26th, at St. Martin's-Church-in-the-Fields, by the Rev. F. C. Paul, John James Johnson, M.R.C.S.E., L.R.C.P.Lond., to S. Mary Robins, of Lausanne, Switzerland.

LONDON—PROWSE.—On the 23rd ult., at St. Mary's, Acton, Marcus Moore London, M.D., to Edith, daughter of the late James Prowse, of Wallingford.

MACKENZIE—CHRISTIE.—On the 18th ult., at St. Mark's Church, Surbiton, Surgeon A. W. MacKenzie, 5th Punjab Infantry, Punjab Frontier Force, to Jessie Thomson, eldest daughter of the late John Christie, of Forthbank, Stirlingshire.

POTTER—WILLIAMS.—At St. Stephen's, Paddington, by the Rev. Dr. Potter, Vicar of St. Luke's, Sheffield, father of the bridegroom, assisted by the Rev. Beresford Potter, Vicar of Wellesbourne, Warwick, brother of the bridegroom, John Hope Potter, M.R.C.S., L.R.C.P., of Cullompton, Devon, to Anita C. Williams, youngest daughter of the late J. H. Williams, Esq., of Glen Beuno, Carnarvonshire.

OBSON—CAMPION.—On the 20th ult., at Edinburgh, by the Rev. Alexander Mair, D.D., Briton Smallman Robson, M.B., C.M.Ed., of 42, Brighton-grove, Newcastle-on-Tyne, to Lizzie, daughter of the late Mr. John Campion, of Edinburgh.

DEATHS.

BRADY.—On the 23rd ult., at Greenhill, Derby, John Charles Brady, M.R.C.S., L.R.C.P.Ed.

CONOLLY.—On the 30th ult., at Wood-green, Charles Thomas Conolly, aged 55.

EAST.—On the 26th ult., suddenly, at Clarence-road, Clapton, Frederick William East, M.D., L.R.C.P., aged 28.

HALPIN.—On the 21tt ult., at his residence, Wicklow, Ireland, George H. Halpin, M.D., aged 66.

LINDEMAN.—On the 23rd ult., Sidney Herbert Lindeman, Army Medical Staff, aged 29.

LINDSAY.—On the 16th ult., of pneumonia, at 20, Clifton-road, Maida-Vale, W., William Vickress Lindsay, M.D., in his 40th year.

MORRIS.—On the 25th ult., at Hampton-park, Hereford, John Morris, F.R.C.S.Eng., D.L. and J.P. for City and County of Hereford, in his 73rd year.

THOMAS.—On the 10th ult., at his residence, Villa Nova, Barbados, West Indies, Grant Ellcock Thomas, M.D., late, and for twenty years, President of Her Majesty's Council in that island, in his 56th year.

WILSON.—On the 21st ult., at his residence, 320, Kensington, Liverpool, J. H. Wilson, M.R.C.S., M.K.Q.C.P.I., in his 66th year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.

Transactions of the American Gynæcological Society. Vol. XI.: pp. 516, with Illustrations.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

Vaso-renal Change *v.* Bright's Disease. By J. Milner Fothergill, M.D.Edin. pp. 219, with Plates and Woodcuts.

BLACKWOOD & SONS, Edinburgh and London.

Introductory Text-book of Physical Geography. By the late D. Page, LL.D. Revised and enlarged by C. Lapworth, LL.D. Twelfth Edition. pp. 280, Illustrated.

BUREAU DU PROGRÈS MÉDICAL, Paris.

Manuel Pratique de la Garde-Malade et de l'Infirmière. Par le Dr. Bourneville. Tom. III. pp. 240—351—236, avec Illustrations.

Leçons de Clinique Chirurgicale, par Terrillon. Rédigées par M. le Dr. Routier. pp. 134.

L'Année Médicale, 1886. Publié sous le Direction du Dr. Bourneville. pp. 402.

CASSINO, S. E., Boston, U.S.A. TRÜBNER & Co., London.

A new Basis for Chemistry. By T. S. Hunt, M.A., LL.D. Cantab. pp. 165.

CENTRAL SCHOOL OF CHEMISTRY AND PHARMACY, Marylebone-road, London.

Materia Medica, including Pharmacy, arranged according to the Synopsis of the Royal Colleges of Physicians and Surgeons of England for the first Examination. By J. Woodland, F.L.S., &c. 2s. 6d.

CHURCHILL, J. & A., New Burlington-street, London.

Hay-fever and Paroxysmal Sneezing, their Etiology and Treatment. With an Appendix on Rose Cold. By Morell Mackenzie, M.D.Lond. Fourth Edition. pp. 96.

The Mineral Waters of Vichy. By Dr. C. E. Cormack. pp. 375.

Vittel: Medical, Picturesque, and Anecdotal. By Paul Rodet, M.D. Paris. pp. 222, Illustrated.

CUPPLES & HURD, Boston, U.S.A.

Dermatitis Venenata: an Account of the Action of External Irritants on the Skin. By J. C. White, M.D. pp. 216.

GRIFFIN, C., & Co., Exeter-street, Strand, London.

An Introduction to the Study of Embryology. By Alfred C. Haddon, M.A., M.R.I.A. pp. 336, with numerous Illustrations.

HOWELL, EDWARD, Liverpool.

Aid-ology; or First Aid to the Injured in its Practical Part, Mechanical and Mental. By Lieut.-Col. C. B. Paris. pp. 106, with Illustrations. 1s. 6d.

LAUPP'SCHEN, H., Tübingen.

Die Psychischen Störungen im Kindes-alter. Von Dr. H. Emminghaus. S. 293.

LEWIS, H. K., Gower-street, London.

The Management of Pregnancy, Parturition, and the Puerperal State, Normal and Abnormal. By Paul F. Mundé, M.D. pp. 110.

Case-book for Practitioners and Students. Designed by A. T. Brand, M.D.

A Practical Treatise on the Diseases of the Rectum. By Alfred Cooper, F.R.C.S. pp. 180.

Guide to the Administration of Anæsthetics. By Henry Davis, M.R.C.S.Eng. pp. 52.

LIPPINCOTT, J. B., & Co., Philadelphia.

A Treatise on the Physiological and Therapeutic Action of Sulphate of Quinine. By O. F. Manson, M.D. pp. 164.

LIVINGSTONE, E. & S., Edinburgh. BAILLIERE, TINDALL, & COX, London.

The Topographical Anatomy of the Child. By Johnson Symington, M.D., F.R.S.E. pp. 75, with 14 Coloured Plates, and 33 Woodcuts.

LONGMANS, GREEN, & Co., Paternoster-row, London.

Elements of Physiological Psychology. By Prof. G. T. Ladd, Yale University. pp. 696, with Illustrations.

The Commonhealth: a Series of Essays on Health and Felicity for every-day Readers. By B. W. Richardson, M.D., F.R.S. pp. 336.

MACMILLAN & Co., London and New York.

A Course of Elementary Practical Histology. By Wm. Fearnley. pp. 363, with Illustrations.

The Climatic Treatment of Consumption. By Jas. Alex. Lindsay, M.A., M.D. pp. 228.

RENSHAW, HENRY, Strand, London.

Fairlie Clarke's Manual of the Practice of Surgery. Revised and partly rewritten by Andrew Clark, F.R.C.S. Fourth Edition. pp. 439, with 214 Engravings.

RIVINGTON, Messrs., Waterloo-place, London.

Animal Biology: an Elementary Text-book. By Prof. C. Lloyd Morgan. pp. 370, with Illustrations. 8s. 6d.

SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON, Fleet-street, London.

Agriculture in some of its relations with Chemistry. By F. H. Storer, S.B., A.M. In Two Volumes. pp. 529—509.

SCOTT, WALTER, Warwick-lane, London.

Life of Charles Darwin. By G. T. Bettany. pp. 175—xxxi.

SHAW & SONS, Fetter-lane, London.

Transactions of the Epidemiological Society of London. New Series, Vol. V. pp. 170.

SIMPKIN, MARSHALL, & Co., Stationers' Hall-court, London. MENZIES & Co., Edinburgh.

The Scottish Sportsman and Tourist. By Robert Hall. pp. 559, with Illustrations. 1s.

SMITH, ELDER, & Co., Waterloo-place, London.

Von Ziemssen's Handbook of General Therapeutics. Vol. VI.: Electro-therapeutics; by William Erb, M.D. Vol. VII.: Therapeutics of Circulatory Derangements; by Prof. M. J. Oertel, M.D. pp. 732—278.

Dictionary of National Biography. Edited by Leslie Stephen. Vol. XI.: Clater-Condell. pp. 470.

A Treatise on the Theory and Practice of Medicine. By J. S. Bristowe, M.D., F.R.S. Sixth Edition. pp. 1269.

STOCK, ELLIOTT, Paternoster-row, London.

The New Religio Medici: Chapters on Present Day Subjects. By Frederick Robinson, M.D., F.R.C.P. pp. 172.

TRÜBNER & Co., Ludgate-hill, London.

Proceedings of the Society for Psychical Research. Part XI. pp. 605. 4s.

VEIT & Co., Leipzig.

Anatomische Untersuchungen am Menschlichen Rectum, und eine neue Methode der Mastdarminspection. Von Dr. W. J. Otis, aus Boston. Erster Theil: Die Sacculi des Rectum. Mit einem Holzschnitt und acht Tafeln.

Boarding-out as a Method of Pauper Education and a Check on Hereditary Pauperism; by Wilhelmina L. Hall, F.R.Met.S.—Journal of the College of Science, Imperial University, Japan, Vol. I., Part 2. Humanism *v.* Theism; by Robert Lewins, M.D.—A new Explanation of the Renal Troubles of Pregnancy and Labour; by A. E. A. King, M.D.—On the Modern Treatment of Urethritis; by G. E. Brewer, M.D. (Wood, New York). — Beiträge zur klinischen Chirurgie; herausgegeben von Dr. Paul Bruns; dritter Band, erates Heft (Laupp'schen, Tübingen).—Sur le Traitement aseptique de la Phtisie pulmonaire; par Drs. A. Filleau et Léon-Petit (Doin, Paris).—A Questão dos Vinhos; pelo Dr. Campos da Paz.—The Influence of Sex in Health and Disease; by Jas. Jamieson, M.D. (Stillwell, Melbourne). —Picturesque Wales; edited by Godfrey Turner. 1s. 6d. — Zur Pathologie und Hydrotherapie der Lungenphthise; von Prof. Dr. W. Winternitz (Toeplitz and Deuticke, Leipzig).—Etudes sur l'Hydrothérapie: par le Dr. P. Glatz.—Untersuchungen über Heterogenese; von Prof. A. P. Fokker.—The Nature of Fever (Gulstonian Lectures); by Donald MacAlister, M.D., F.R.C.P. (Macmillan).—On Forecasting the Weather; by B. G. Jenkins (Hayez, Brussels).—Ague, or Intermittent Fever; by M. D. O'Connell, M.D. &c. (Thacker, Calcutta).—Ovariotomy at the Samaritan Free Hospital; by Mons. H. Varnier (Stott, London).—Die pathologische Anatomie und Physiologie des Joh. Bapt. Morgagni (1682-1771); von Kreis-Physikus Dr. F. Falk (Hirschwald, Berlin).—Common Infective Fevers and the Use of Disinfectants, with Notes on the Health of Children; by Wm. Squire, M.D. (Churchills).—Malarial Hæmorrhage; by O. F. Manson, M.D.—Index Medicus, Vol. IX., No. 5.—Income-tax, how to get it Refunded; by A. Chapman, Esq. (E. Wilson).—On Sore-throat; by J. Haddon, M.A., M.D. 1s.—Magazines for July: Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, Good Words, Sunday Magazine, Scribner's Magazine. — Handbuch der Physiologischen Optik; von H. v. Helmholtz: vierte Lieferung (Voss, Hamburgh).—Intelligence in the Van; by Horace Dobell, M.D. (Wertheimer).

Medical Diary for the ensuing Week.

Monday, July 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

Tuesday, July 5.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

Wednesday, July 6.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Steavenson, Dr. Horrocks, and others.—Adjourned discussion on Dr. Walter Griffith's paper on Tubo-ovarian Cysts.—Dr. Matthews Duncan: Diabetes Insipidus in Women.—Dr. Champneys: (1) Some Causes of Retention of the Membranes; (2) Note on the Relation between the Position of the Placenta and the Insertion of the Cord.

Thursday, July 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—4 P.M. Report of Council. Professor Alex. Macalister: A Note on Some Common Errors in Descriptions of the Brachialis Anticus Muscle.—Dr. Brooks (Dublin): On the Short Muscles of the Pollux and Hallux of the Anthropoid Apes, with special reference to the Opponens Hallucis (with specimens).—Mr. J. Bland Sutton: A Critical Study in Cranial Morphology.—Messrs. Rickman J. Godlee and C. Stonham: Casts of Bronchi.—Mr. James Berry: Notes on the Anatomy of the Thyroid Body (with specimens).—Mr. W. Bruce Clarke: Apparatus for Mounting Specimens.—Dr. W. J. Collins: Anatomical Specimens.—Mr. Lockwood: Cases for Mounting Frozen Sections.—Professor Curnow: Abnormal Subclavian Artery (with specimen).

Friday, July 8.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Election of office bearers. Living and card specimens at 8 P.M. Mr. W. Spencer Watson: (1) Sequel to a case of Hæmorrhagic Glaucoma (with specimen); (2) Case of Serpiginous Nebula of Cornea.—Mr. Lawford: A case of Ophthalmoplegia Externa.—Mr. J Hutchinson, jun., and Dr. Robinson: Case of Ophthalmoplegia Externa, with Autopsy.—Mr. Cross (Bristol): Sympathetic Ophthalmitis occurring after Evisceration.

Saturday, July 9.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 30th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 24	30·28	N.E.	56	54	98	65	54	...	Overcast
,, 25	30·26	E.	55	53	96	70	53	...	Overcast
,, 26	30·25	E.	56	53	...	62	50	...	Overcast
,, 27	30·22	N.E.	58	54	116	85	50	...	Hazy
,, 28	30·24	E.	62	57	105	74	56	...	Cloudy
,, 29	30·40	E.	66	60	101	74	60	...	Hazy
,, 30	30·47	N.E.	60	57	82	64	57	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

"A WORM IN AN EGG."

THE specimen (see THE LANCET, June 18th, page 1269), after being immersed in water for several days, was carefully examined. It had a superficial resemblance to a tapeworm, being about two inches and a half in length and a quarter of an inch in width at its posterior truncated extremity, there being, further, an appearance of a head at the opposite extremity. Moreover, it had an obscurely segmented character. The microscopic examination did not bear this surmise out; for it showed the mass to be quite structureless, and infiltrated with lime salts in its outer layers, which were laminated. It is much to be regretted that the specimen was not placed in a preservative solution as soon as it was obtained, as it had doubtless undergone considerable change from desiccation.

Dr. Wedgwood.—The Anchor line plying from Glasgow to New York offers to members of the profession return tickets to the United States capital for £20.

Surgeon and Apothecary might try bismuth, hydrocyanic acid, &c., and feed the patient frequently on small doses of iced beef-juice, milk, &c.

Mr. J. Lewtas.—In an early number.

INVERSION OF THE UTERUS.

To the Editors of THE LANCET.

SIRS,—Dr. Montagu Handfield Jones, in describing two cases of acute inversion of the uterus in THE LANCET of this week, considers that the cause of one of them was the shortness of the umbilical cord—i.e., fifteen inches. I doubt much if with this length of cord the cause he mentions could have operated. I have before me notes of two cases of short cord, in one of which the placenta was adherent high up in an elongated cornu, the cord measuring ten inches; in the other, with non-adherent placenta, it measured just nine inches and a half. In neither case was there any attempt at inversion. Indeed, in the first case the uterus was in a state of hour-glass contraction.

I am, Sirs, yours truly,

F. R. HUMPHREYS, L.R.C.P., &c.

Queen's-crescent, N.W., June 27th, 1887.

"AN URGENT CASE."

DR. GLOVER desires to acknowledge the receipt of £5 5s. towards the above case (THE LANCET, May 28th) from "W. M. B."

Mr. J. Botten.—Foreign diplomas are recognised in Turkey; but we believe some formality has to be gone through at the Military Medical School before the right to practise is fully and officially granted.

Public Vaccinator.—Unless our correspondent could show a very special and satisfactory reason for vaccinating in less than four places, he would not receive the grant.

M. Jones.—The piercing the ear may act as a counter-irritant.

THE JUBILEE BOOK OF THE CHURCH OF ENGLAND TEMPERANCE SOCIETY.

WE have just received a copy of this book, which is also a Guide-book to the bazaar now being held on behalf of the Society in the Duke of Wellington's Riding School, Knightsbridge. It is edited by the Rev. J. Grant Mills, M.A., Hospitaller of St. Thomas's Hospital, is profusely illustrated, and has been well produced by Messrs. Cassell & Co. Among the contributors are H.R.H. the Princess Beatrice, Professor Herkomer, A.R.A.; Mr. Lewis Morris, who sends an excellent poem on "Temperance," the temperance of the whole man; Edna Lyall, John Shorthouse, Mr. Molesworth, Mr. A. J. Caldecott, and Canon Ellison, who has written the history of the Society from its formation, a purely total abstinence society in 1862, to its present broad basis: "Union and co-operation, on perfectly equal terms, between those who use and those who abstain from intoxicating drinks." Special features of the book are the illustrations of the stalls, which all have reference to the diocese, county, or the various departments of the Society's work which they represent. At the end of the book there is a programme of the various entertainments to be held during the bazaar, but it will be of more than passing value as a guide during the week, from the interesting history of the Society which it contains, and its contributions from so many well-known artists and authors. The production reflects great credit on its well-known and energetic editor and those who have assisted him.

A Locum.—We think the practitioner should allow the *locum tenens* to retain the fee in such a case; but legally it is to be considered as belonging to the former. A *locum tenens* cannot be regarded as an independent practitioner.

Messrs. Woodhouse and Rawson.—A specimen of the apparatus should be forwarded for our inspection.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

To the Editors of THE LANCET.

SIRS,—I will thank you to be so good as to insert the underadded copy of a letter received from the Under-Secretary of State in your next issue of THE LANCET. I am, Sirs, yours very truly,

June 27th, 1887. J. HENRY RUTHERFORD, Secretary.

"Whitehall, 16th June, 1887.

"Sir,—With reference to your letter of the 18th ultimo, I am directed by the Secretary of State to acquaint you that he has laid before the Queen the application of the Governors of the Newcastle-upon-Tyne Infirmary for permission to adopt the title 'Royal' in the name of that institution, and that her Majesty has been graciously pleased to accede to their request, and to command that the Infirmary be styled in future 'The Royal Infirmary for the Counties of Newcastle-upon-Tyne, Northumberland, and Durham.'

"I am, Sir, your obedient servant,

"GODFREY LUSHINGTON.

"The Secretary to the Infirmary, Newcastle-upon-Tyne."

"THE SILENCE OF DEAN MAITLAND."

IT will be interesting to many of our readers to learn that the author of the above work, which we noticed in our last issue, is the daughter of an old and much respected general practitioner in the Isle of Wight.

A Widow.—It seems probable that the unpleasant difficulty arises from some vagueness in the terms of the contract or understanding between our correspondent and her former medical attendant. A "consultation" used by a general practitioner may mean seeing a patient at the house of the medical man, as distinguished from a "visit" at the patient's house. We are not told in the letter sent us whether the charge for a visit in the original contract was to cover a visit to any number of persons, or only to one. These omissions make it impossible for us to advise dogmatically in the matter. A medical man is not generally asked for particulars, but he ought to be ready to give them when reasonable and courteous request is made. We should advise our correspondent to continue her efforts to close the account amicably. We see no good in publishing the letter, which, of course, is a one-sided statement.

Dr. G. Ria (Naples).—We regret that we cannot at present extend our exchange list.

R. M. B. should address his question to his ordinary medical attendant.

A CORRECTION.

To the Editors of THE LANCET.

SIRS,—At page 144 of my recently published "Treatise on Diseases of the Skin" there is an unfortunate printer's error. The first prescription on that page, marked with an asterisk, is for an arsenical mixture, and the dose is stated to be a tablespoonful. It should have been a *teaspoonful*. This mistake has been corrected in the copies still in the publishers' hands; but as there are no means of communicating directly with all those who have already purchased the book, I shall feel obliged if you will kindly intimate this correction in THE LANCET.

I am, Sirs, your obedient servant,

Glasgow, June 23rd, 1887. T. MCCALL ANDERSON

THE LEMON DECOCTION IN MALARIA.

THIS remedy has, besides its anti-malarial efficacy, distinct value as a tonic to the stomach. Its preparation is thus given by Dr. Tommasi-Crudeli, who first introduced it to the profession:—Take a fresh lemon; cut it in thin slices, rind and all; boil it in three tumblerfuls of water in an earthen pot which had not been previously used for culinary purposes; prolong the boiling till the liquid contents of the pot have been reduced to one-third—that is, to the volume of one tumbler. Pass the decoction through muslin, squeezing out the residue of the lemon, and let it cool for several hours. Let the whole be taken in the early morning, fasting. "The drink," adds Tommasi-Crudeli, "is rather bitter, but not distastefully so; it is easily taken by delicate women and children, and when it has reached the stomach it induces the pleasant sensation peculiar to tonic remedies." Its use is especially indicated in the tropics.

L.S.A.—Our correspondent's certificates were ample. He should complain of the remarks of the registrar of deaths to the Registrar-General. Benefit societies are entitled to ask for a copy of the death certificate from the registrar; but it is intolerable that he should disparage certificates on the faith of which he himself registers deaths. Medical men are surely entitled to different treatment from registrars.

W. W. is referred to our advertising columns.

THE GLASGOW LOCK HOSPITAL.

To the Editors of THE LANCET.

SIRS,—In your memoranda upon lock hospitals in your last issue you omit to mention that in addition to the Glasgow Lock Hospital for Females there is a ward containing fourteen beds set apart in this infirmary for the treatment of male patients suffering from venereal disease. These patients were formerly treated in the general wards; but, as this was obviously improper, a special ward was provided for them many years ago, under the charge of a male nurse. It is, so far as I know, the only place in the city for the treatment of this disease in males, and it seems to be sufficient, as it is seldom the beds are fully occupied.

I am, Sirs, yours truly,
M. THOMAS, M.D., Supt.

Royal Infirmary, Glasgow, June 27th, 1887.

CASE OF VOMITING PERSISTING FOR THIRTEEN YEARS.

To the Editors of THE LANCET.

SIRS,—I have under my care a case of obstinate vomiting which has been going on for thirteen years. It has been under the care of several physicians, but no benefit has been derived. I have tried all the usual remedies for such cases, but so far without success. Tongue red, papillæ prominent, nose retracted, pinched and haggard expression, bowels constipated. Commences in early morning, subsides towards midday. No history of alcoholism, cancer, or ulcer. I should be much obliged if any of your readers could favour me with any idea as to the line of treatment to be adopted.

I am, Sirs, yours truly,
M.R.C.S. ENG.

June 19th, 1887.

"REMOVAL OF BREAST TUMOUR WITH THE AID OF COCAINE."

To the Editors of THE LANCET.

SIRS,—In answer to the note of Mr. Tandy, I beg to state that my sole object in claiming any priority was to elicit further correspondence on the subject, in order to ascertain the extent to which cocaine has so far been pushed, and with what results. As a matter of fact, the operation was performed on April 1st.

I am, Sir, yours faithfully,
EDW. F. GRÜN.

Putney, June 24th, 1887.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Goodhart, London; Dr. Lindsay, Belfast; Dr. Savage London; Dr. Steavenson, London; Dr. McCall Anderson, Glasgow; Mr. Da Costa, Kingston, Jamaica; Dr. Thomas, Glasgow; Mr. Hulme, Birmingham; Mr. Marcus Gunn, London; Mr. Mansell Moullin; Mr. White, Wolverhampton; Dr. Macgregor, Wellington; Mr. J. Attfield, London; Dr. Beresford Ryley, London; Mr. F. R. Humphreys, London; Messrs. C. Griffin and Co., London; Mr. G. J. Monkton, London; Messrs. Street and Co., London; Surg.-Major Fleming, Edinburgh; Messrs. Robertson and Scott, Edinburgh; Mr. W. A. E. Waller, Rugby; Mr. R. Bruce Low, Helmsley; Mr. W. H. Symons, London; Messrs. Mottershead and Co., Manchester; Mr. Suchorowski, London; Messrs. Oliver and Boyd, Edinburgh; Mr. J. J. A. Raye, Dulwich; Messrs. Cassell and Co., London; Mr. Grün, Putney; Mr. Wedgwood; Messrs. Kegan Paul and Co., London; Mr. C. Williams, Norwich; Messrs. Burgoyne and Co., London; Dr. H. Dobell, Bournemouth; Messrs. Hooper and Co., London; Surg.-Major Hartley; Mr. C. E. Monro, Penge; Mr. J. Lambert, London; Mr. R. Davy, London; Mr. J. H. Rutherford, Newcastle-on-Tyne; Mr. B. Relton, Rugby; Mr. G. Wright; Mr. J. Lewtas, London; Mr. J. Chambers, Oldham; Messrs. Johnson and Co., Southport; Mr. A. Gray, Dalton-in-Furness; Messrs. Orridge and Co., London; Dr. O. F. Manson, Richmond, Va.; Messrs. Smith and Son., Manchester; Mr. C. H. Wells, London; Messrs. Blake and Co., Leeds; Mr. Bateman, London; Mr. Mitchell, Derby; Dr. C. S. Taylor, London; Mr. G. Padley, Swansea; Dr. Peregrine; Mr. H. C. Gillies, Brockley; Dr. Clermont, Paris; Mr. Marrack, Truro; Dr. S. Fenwick, London; Mr. Fiske, Dawlish; Mr. J. M. Richards, London; Mr. Stephenson, Kew; Dr. Reid, Staffordshire; Mr. Alcan; Dr. R. Lee, London; Dr. Chapman, Paris; Dr. Lettes, Dundee; Mr. Flint, Southampton; Mr. Hague, London; Mr. Purnell, London; Mr. Sell, London; Mr. Morgan, Kinnerley; Mrs. Browne, London; Dr. Bowen, Rangoon; Mr. Hollee, Westgate-on-Sea; Mr. Hyde; Mr. Griffith, Lampeter; Mr. Fox, Birmingham; Mr. Yates, Walworth; Mr. Grace, St. Andrews; Mr. Saunders, Manchester; Mr. Leighton, Cheltenham; Mr. Robinson, Sedburgh; Mrs. Warren; One of its Members; Anxious; Alpha; M. S.; M.B.; C. J. B.; A. De B.; C. L.; An Old Oxonian; A Scalpel; A Widow; Secretary, Bristol; Vita brevis, gloria æterna; J. G. O., Cranford; Optimus, Leeds; Lady Superintendent, Worthing.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Jennings, Coleford; Mr. Haigh, Wilton-under-Wychtwood; Messrs. Fannin and Co., Dublin; Mr. Vincent, Ryde; Mr. Wakefield; Mr. Fox, Bishop Auckland; Mrs. Theobald, Leicester; Mr. Huggins, Malvern; Mr. G. Lawson, London; Mr. Swinburne, Worthing; Messrs. Hewlett and Co., London; Mr. Baker, York; Mr. Tophop, Kensington; Mr. Mason, Chelsea; Mr. Dolbrasheow, Constantinople; Messrs. Reynolds and Co., Leeds; Mr. Townson, Chester; Mr. Miller, Cleveland; Dr. Eelas, Bonchurch; Dr. Parkinson, Manchester; Dr. Dawson, Southbourne; Mr. Mitchell, Manchester; Mr. Hunt, Southampton; Mr. Burchall, Liverpool; Miss Gisnes, Maidstone; Mr. James M. Laing, Petersham; Nurses, Christchurch; Medicus, Midland; M. M., London; Locum, Bacup; W., Blackburn; D., Dublin; J. T. D., Dalston; Surgeon, Bolton; Liber; V. B., Bromley; L. W. H., Llanelly; C. Y.; J. B. B., Norwood; T. P. N.; B. S. R.; Surgeon, Highbury; Domas; J. T. H., Kennington; Medicus, Caersws; Alpha, Everton; Medicus, Sheffield; Dispenser; Medicus, Hackney; Alpha, Leicester.

Bristol Observer, Scotsman, Isle of Man Examiner, Willesden and Kilburn Herald, Colonial Standard, Hampshire Independent, Hong Kong Daily Press, Echo, Halifax (Novia Scotia) Morning Chronicle, Southwark Standard, Burton Chronicle, Glasgow Herald, Gl' Incurabili, &c., have been received.

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